Updated Referencing and Self-certification Report of the Croatian Qualifications Framework to the European Qualifications Framework and to the Qualifications Framework of the European Higher Education Area (2025)

Co-funded by the European Union

REPUBLIC OF CROATIA
Ministry of Science, Education and Youth

Croatian Qualifications Framework

Publisher:
Ministry of Science, Education and Youth

For the publisher:
Prof. Radovan Fuchs, PhD

Edited by:
Josipa Češnovar, Ministry of Science, Education and Youth

Authors:
Josipa Češnovar, Ministry of Science, Education and Youth
Josipa Dragičević, PhD, Ministry of Science, Education and Youth
Ivana Krešić Klaucke, PhD, Ministry of Science, Education and Youth
Andreja Uroić Landekić, Ministry of Science, Education and Youth
Sandra Bezjak, MSc, Agency for Science and Higher Education
Emita Blagdan, MSc, Agency for Science and Higher Education
Nino Buić, Agency for Vocational Education and Training and Adult Education
Mario Vučić, Agency for Vocational Education and Training and Adult Education
Filip Car, Education and Teacher Training Agency
Renata Ozorlić Dominić, Education and Teacher Training Agency

Authors of the report were members of the National Team for updating the referencing of the Croatian Qualifications Framework against the EQF and the self-certification against the QF-EHEA report.

International experts:
Aleksandar Sladojević (Slovenia)
Eduard Staudecker (Austria)

National experts:
Associate Professor Morana Koludrović, PhD (higher education)
Associate Professor Daliborka Luketić, PhD
Marina Pleša (vocational education and training)
Goran Švast (adult education)

Editorial staff:
Dijana Mandić
Loredana Maravić, MSc

The Section for the Croatian Qualifications Framework, Ministry of Science, Education and Youth:
Petar Šutalo, PhD
Patricija Vengust

Graphic design by:
Intergrafika ttž d.o.o.

Proofread by:
Studio Nixa prijevodi d.o.o.

ISBN: 978-953-8374-19-7

Funded by the European Union. Views and opinions expressed are however those of the author only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Zagreb, 2025

Updated Referencing and Self-certification Report of the Croatian Qualifications Framework to the European Qualifications Framework and to the Qualifications Framework of the European Higher Education Area (2025)

Executive summary

This report presents an Updated Referencing and Self-certification Report of the Croatian Qualifications Framework (CROQF) to the European Qualifications Framework (EQF) and to the Qualifications Framework of the European Higher Education Area (QF-EHEA) (hereinafter: the Report). It presents the existing Croatian qualifications system and the development and implementation of the CROQF, with the focus on changes from the last report. Moreover, it gives a background of the fulfilment and response to the EQF and QF-EHEA criteria, procedures and common quality assurance principles, demonstrating that the CROQF is compatible with both overarching frameworks.

The CROQF has been defined as a single national framework through which all learning achievements may be measured and compared in a coherent way, defining the relationship between all education and training awards. Nowadays, it has 13 levels described in terms of learning outcomes. The Report provides detailed tables of learning outcomes ascending from level 1 to level 8.2 as referenced to the EQF and the QF-EHEA in order to facilitate a better understanding of the qualifications being awarded in Croatia and to demonstrate the link between CROQF level descriptors and EQF level descriptors. Furthermore, the Report includes responses to each of the referencing criteria and procedures developed in order to guide and oversee the referencing process. Finally, the last part of the Report goes beyond the referencing process, providing a vision for the further development of the CROQF as the main instrument for overall reform of the Croatian education and training system.

The Report is structured in six main parts, including this summary.

The first part is an introduction which contains a summary of main CROQF developments as well as development of the European level.

In the second part, the national and international background for the referencing process is given. The Croatian education system is thoroughly presented with the intention to make it understandable for international as well as national readers. Moreover, background information related to the development of the EQF and QF-EHEA is provided with special emphasis on the benefits of the referencing and self-certification process for citizens holding Croatian qualifications.

In the third part, the development, role, main concepts, and objectives of the CROQF are elaborated together with the developments from the last report.

The fourth part explains the detailed cross-referencing to the EQF in terms of the response to the criteria and procedures for referencing national qualifications frameworks or systems to the EQF and to the response to the Common Principles for Quality Assurance.

In the fifth part, Croatia's responses to each of the criteria and procedures prescribed for the self-certification process are demonstrated.

Finally, the last chapter of the Report provides a perspective for the further development of the CROQF.

1. Introduction 9
2. Background 13
2.1 Croatian background 14
2.1.1 Preschool Education 15
2.1.2 Primary Education 17
2.1.3 Secondary Education 19
2.1.4 Postsecondary professional education and training 33
2.1.5 Adult Education 36
2.1.6 Higher education 38
2.2 European Background 58
2.2.1 European Qualifications Framework 58
2.2.2 Qualifications Framework of the European Higher Education Area 59
2.2.3. Rationale and Purpose of the Referencing of the CROQF to the EQF and the QF-EHEA 59
3. Development of the CROQF and main concepts of the CROQF 61
3.1 CROQF 62
3.1.1 Development of the CROQF from the last report 62
3.1.2 CROQF and policy developments 63
3.1.3 Basic legislation and guidelines on the CROQF 64
3.1.4 CROQF in legislation 65
3.1.5 Institutional set-up of the CROQF 65
3.1.6 Main functions of the NQF in the national context 67
3.1.7 Main success factors related to the CROQF 68
3.1.8 Communication on the CROQF, EQF and other related tools 69
3.2 Main concepts of the CROQF 70
3.2.1 CROQF Register 70
3.2.2 Learning outcomes 72
3.2.3 Workload/Volume of qualifications and units of learning outcomes – CROGE, CSVET and ECTS 74
3.2.4 Types of Qualifications in the CROQF 74
3.2.5 Full and partial qualifications 75
3.3 CROQF and related policy initiatives 78
3.3.1 Microcredentials and the CROQF 78
3.3.2 Enhancement of teacher competencies 79
3.3.3 Recognition of non-formal and informal learning 81

3.3.4 Recognition of Foreign Qualifications in Croatia 82
3.3.5 Academic integrity 83
4. Updated referencing to the EQF 85
4.1 Response to the EQF Criteria and Procedures: Criteria and procedures for referencing national qualifications frameworks or systems to the European Qualifications Framework (EQF) 86
4.2 Response to the Common Principles for Quality Assurance 93
5. Self-certification process and report 105
5.1 Responses to the QF-EHEA Criteria 110
5.2 Responses to the QF-EHEA Procedures 116
6. Challenges in the implementation of the CROQF and further plans 119
7. Written statements 125

Introduction

1. Introduction

The Recommendation for the establishment of the EQF was formally adopted by the European Parliament and the Council in 2008. The EQF was established as an overarching qualifications framework which would serve as a translation device to make qualifications more comprehensible across the different countries and systems in Europe. It is based on eight qualifications levels described in terms of the learning outcomes of knowledge, skills, and wider generic competencies (autonomy and responsibility), and the referencing process is intended to enable those outside a particular country to better understand the country's national qualifications system and thus promote citizens' mobility between countries.

On 22 May 2017, the Council Recommendation on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning was adopted. According to the Recommendation, national qualifications frameworks and systems change over time, therefore referencing to the EQF should be reviewed and updated, whenever relevant, in line with the levels of the EQF set out in Annex II and using the criteria set out in Annex III, with due regard to the national context. Furthermore, within six months from having referenced or updated the referencing report, Member States and other participating countries need to publish the referencing report and provide relevant information for comparison purposes on the relevant European portal.

In parallel with the establishment of the EQF, the Communiqué of the Conference of Ministers responsible for Higher Education in Berlin on 19 September 2003 called for the elaboration of an overarching framework for qualifications of the European Higher Education Area. Subsequently, the QF-EHEA, i.e., the "Bologna Framework", was adopted by European Ministers for higher education in Bergen in May 2005. In the Leuven/Louvain-la-Neuve Communiqué, the Ministers stated that they "aimed at having national qualifications frameworks implemented and prepared for self-certification against the overarching QFEHEA by 2012". Together with the EU Member States and candidate countries, Croatia was invited to reference its national qualifications levels to the relevant levels of the EQF. Moreover, by having participated in the Bologna Process since 2001, Croatia was equally invited to self-certify its higher education qualification development levels to the levels of the QF-EHEA.

In February 2013, the Croatian Government adopted the CROQF Act which gave the necessary legislative and institutional framework for further development and implementation of the CROQF as well as for the referencing and self-certification of the CROQF to the EQF and the QF-EHEA. According to the CROQF Act, the Ministry of Science, Education and Youth (MSEY) is the National Coordinating Body responsible for the development and implementation of the CROQF as well as the designated National Coordination Point (NCP) responsible for coordination of the referencing of CROQF levels to the EQF and for the self-certification of the CROQF against QF-EHEA using transparent methodology, providing access to information, guiding stakeholders through the referencing process, and promoting the participation of stakeholders in the referencing process.

With the **2021 amendments of the CROQF Act,** changes were introduced in terms of assigning higher education qualifications to CROQF levels, taking into account the differences between and value of both academic and professional studies. Level 6.st covers professional bachelor's diplomas, while 6.sv includes university bachelor's diplomas. Similarly, levels 7.1.st and 7.1.sv respectively include professional and academic master's diplomas. The fundamental difference between professional and university studies stems from the different learning outcomes that are acquired in different types of studies. The descriptions of learning outcomes defined by the CROQF focus on the complexity and content of learning outcomes, and not on the type of study or the institutional context in which these

outcomes are acquired. Qualifications acquired at university and professional studies differ in the share of knowledge and skills in learning outcomes. The diversity of university and professional studies is recognized by the use of the CROQF in the content and complexity of learning outcomes and their purpose. Graduates of university studies are directed to work in science, art and higher education, the public sector, etc., and they open the possibility of enrolling in doctoral studies, but they also train them to perform professional occupations. On the other hand, graduates of professional studies are directed primarily to the performance of professional occupations and direct involvement in the work process.

Additional changes were also introduced with the 2021 amendments to support better efficiency in the procedures of the inclusion of occupational and qualifications standards in the CROQF Register and their evaluation, including responsibilities of relevant institutions in this process.

According to the new procedures, requests for inclusion of qualification standards in the CROQF Register are sent to agencies in the education system (Agency for Science and Higher Education (ASHE), Agency for Vocational Education and Training and Adult Education (AVETAE) and Education and Teacher Training Agency (ETTA), and requests for inclusion of occupational standards in the CROQF Register are still sent to the Ministry of Labour, Pension System, Family and Social Policy (MLPSFSP). The agencies in the education system make decisions on the entry of qualification standards in the CROQF Register, and MLPSFSP makes decisions on the entry of occupational standards in the CROQF, based on the opinion of the evaluation committees established by the agencies in the education system, that is, MLPSFSP. Sectoral councils have a more strategically oriented role and are no longer in charge of expert evaluation of proposals for occupational standards and qualification standards, and administrative and professional support is no longer provided by this MSEY, but by agencies in the education system. MSEY is still responsible for maintenance and development of the Information System of the CROQF Register. This change was introduced because due to the reform role of the CROQF, which implies an intensive dynamics of processes in the CROQF Register, it has become clear that the institutional framework also needs to be adjusted. Continuity was ensured since all procedures started according to the previously valid law continued in accordance with the amended Law.

Quality assurance procedures have changed significantly since the presentation of the initial report.

The CROQF has been initially developed as a tool that could be used on a voluntary basis. It was additionally encouraged using available funds within the Erasmus+ programme, the European Social Fund and other programmes. Following the legislative changes that took place mostly in 2021 and 2022, the CROQF is now incorporated into all important legislation pertaining to quality assurance in different parts of education.

According to the **Act on Vocational Education and Training** (Official Gazette, No. 30/09, 24/10, 22/13, 25/18, 69/22), in line with the 2018 Amendments, the vocational curriculum is adopted on the basis of one or more qualification standards that have been developed on the basis of one or more occupational standards in accordance with the concept of the CROQF. According to the **Act on Adult Education** (Official Gazette, No. 144/21), both formal education programmes and evaluation programmes, as well as non-formal education programmes that are financed through vouchers must be aligned with the CROQF Register. In the **Act on Quality Assurance in Higher Education and Science** (Official Gazette, No. 151/22), which prescribes the criteria for the initial accreditation of studies, it is stipulated that when evaluating a study programme, the compliance of the study programme with the qualification standard entered in the CROQF Register is evaluated as well. A new **Act on Higher Education and Scientific Activity,** adopted in 2022, regulates the link between lifelong learning programmes in higher education and the CROQF.

A new **Act on Recognition and Assessment of Foreign Education Qualifications (Official Gazette, No. 69/22)** has just entered into force in Croatia. It contains provisions on automatic recognition from Council's Recommendation on promoting automatic mutual recognition of qualifications.

A new **Act on Higher Education and Scientific Activity,** adopted in 2022, regulates the link between lifelong learning programmes in higher education and the CROQF.

In the period from 2018 to 2020, subject curricula for all obligatory subjects for **elementary and grammar schools** (gimnazija), as well as subject curricula for general subjects for vocational secondary school at level 4.2. Curriculums of 7 cross-curricular topics were developed.

In August 2023, the National Team for updating the referencing and self-certification of the CROQF against the EQF and the self-certification against the QF-EHEA report, was nominated. The team was composed from representatives of MSEY, AVETAE, ASHE and ETTA.

Two international experts were selected in the beginning of the work on the report in order to strengthen international trust in the process. Perspective of international experts contributed to the structure of the Report from the early beginning as well as to the clarity and relevance of the comprehensive content. Moreover, good practice examples of involvement of stakeholders were consulted with international experts.

Involvement of broader public in the discussion on the CROQF on national level was achieved through a conference on the CROQF for the wide range of stakeholders (policy makers, educational institutions, employers, general public). Conference was held live in Zagreb on December 6, 2023. The conference marked ten years of the implementation of the CROQF and served as a platform for discussion on current topics related to education and the labour market with a focus on digital and green transition.

Discussion with the National Council for the Development of Human Potential (hereinafter: NCDHP) was held on March 26, 2024 at the 12th session of the NCDHP in second mandate. Since the NCDHP is established as a strategic body for the development of the CROQF, a moderated discussion on current challenges in the implementation of the CROQF and on the further development of the CROQF was held at the thematic session of the NCDHP. Based on the discussion, the Report was further updated.

Furthermore, individual experts from different parts of the educational system in Croatia (higher education, vocational education, adult education) were included in the further work on the Report in 2024. The contribution of experts was sought primarily in the formulation of challenges in the implementation of the national qualifications framework in practice in order to formulate further plans for the development and implementation of the CROQF.

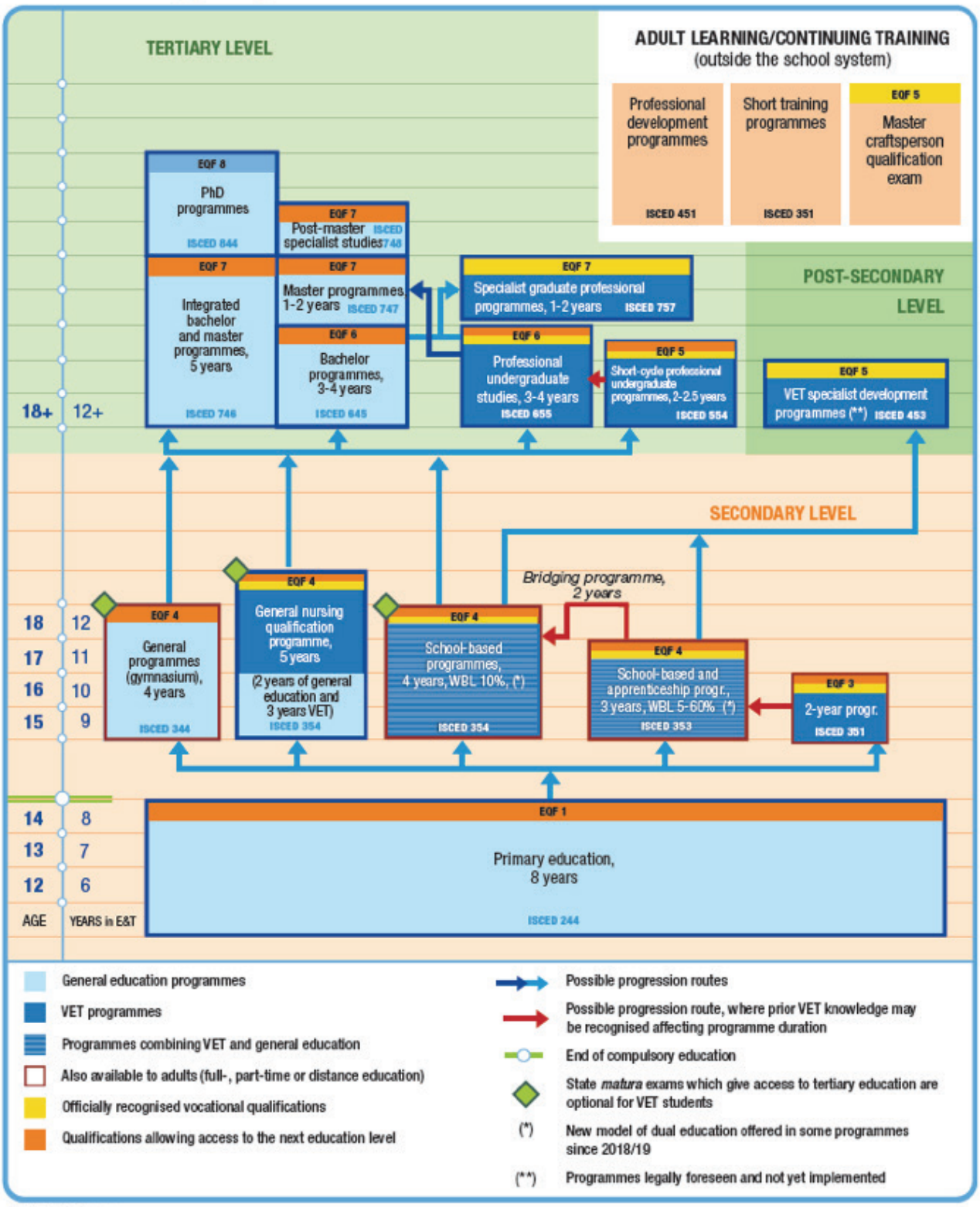
The Updated referencing and self-certification report of the CROQF to the EQF and the QF-EHEA was presented at the 66th meeting of the EQF Advisory Group, on 26-27 November 2024. The main purpose of this document is to update referencing of the CROQF against the EQF and the self-certification against the QF-EHEA, thus demonstrating that the CROQF is compatible with both overarching frameworks.

Background

2. Background

2.1 Croatian background

The Croatian education system encompasses services at the following levels: preschool, primary, secondary and higher education, including primary and secondary education, and training for adults. Attention is also given to the principle of lifelong learning, with the aim of including adults and the unemployed in flexible educational and training programmes to qualify them for participation in the labour market.



NB: ISCED-P 2011.

Please cite as: Cedefop; ReferNet Croatia (2022). VET in the Croatian education and training system. In: Cedefop; ReferNet (2022). *Vocational education and training in Europe* [database]. www.cedefop.europa.eu/en/tools/vet-in-europe

2.1.1 Preschool Education

According to data on preschool education available for pedagogical year 2022/23, the total number of preschools is 1 583, of which 1 195 are public (75.5%), 330 (21%) are private, and 58 (3.5%) are religious preschools. There are 147,888 children enrolled in preschool programmes. In comparison to the previous pedagogical year 2021/22 this is an increase of 5 448 children enrolled. Out of the total number of children in preschool programmes, 120,037 (81.6%) are in public, 24 149 (16.3%) in private, and 3 702 (2.1%) in religious preschools. Of the total number of preschool children, 81.0% are enrolled into preschools founded by local self-government; 80.4% of children spend 8 hours a day in preschool education and care.

Children in preschool education according to age: 22.03% of children up to 3 years of age, 37.36% of 3-5 years of age, and 40.61% of 5-7 years of age.

Figure 2.1: Distribution of the share of children enrolled in preschool education programmes by specific age groups.

Employees and preschool teachers

The total number of staff employed in preschools is 25 380, of whom 15 446 (61%) are preschool teachers. The number of preschool teachers employed in public preschools is 12 806 (83%), in private preschools 2 278 (14.7%), while 362 (2.3%) of preschool teachers are employed in religious preschools.

Legislation in the field of preschool education and care programmes:

Preschool Education Act (Official Gazette, No. 10/97, 107/07, 94/13, 98/19, 57/22, 101/23);

Rules on the qualifications of professional staff in preschools, and on the type and level of qualifications of other preschool employees (Official Gazette, No. 133/97);

Rules on the content and duration of preschool preparation programme (Official Gazette, No. 107/14);

National Curriculum for Early and Preschool Education and Care (Official Gazette, No. 5/15);

National Pedagogical Standard for Preschool Education (Official Gazette, No. 63/08, 90/10);

Act on ETTA (Official Gazette, No. 85/06, 151/22).

Main governing bodies:

MSEY is the policy body responsible for planning, funding and monitoring of the overall education system. MSEY is responsible for administrative and other activities related to preschool education, ensuring financial and material conditions for work. Besides MSEY, MLPSFSP is also a policy body responsible for preschool education and care programmes. ETTA is a public institution responsible for the provision of professional development and advisory support in the area of general education in Croatia. Firstly, it was established as an institute for teacher support in 1874, and its role has been changing throughout time. Its legal successor, the Institute of Education of the Republic of Croatia was founded in 2002 (Official Gazette, No. 153/02) and was re-named and restructured as ETTA by the Act on the ETTA (Official Gazette, No. 85/06).

Since the previous report, Preschool Education Act has been amended to include the right of every child of early or preschool age to enrol into a preschool education and care programme. The obligation of local self-government units is to co-fund the preschool education and care in their territory, or to co-fund or fund the transport of children from their territory to the closest self-government unit, which provides preschool education and care.

The amendments to the Preschool Education Act also refer to the National Curriculum for Early and Preschool Education and Care, as the foundation for the provision of preschool education and care

Table 2.1: Structure and key aspects of preschool education.

Entry requirements	Not younger than 6 months of age Age 6 – for preschool preparation programme (those who were not in preschool education before)
Education and training	Preschool programmes encompass regular, special and alternative programmes as well as programmes for children with disabilities, for gifted children and for children of national minorities. Children with disabilities may be integrated into any of the preschool programmes. In addition, there are special education institutions for children with disabilities, depending on disabilities. Providers of preschool programmes are accredited public, private and religious preschools. Preschool education begins at 6 months of age, and lasts until the enrolment into primary school. At the age of 6, a one-year preschool preparation programme is compulsory for all children who are not enrolled into preschool programmes.
Financing	Public (local and/or state) and private (parents)
Teachers' qualifications	Qualification for preschool teachers (first cycle qualifications);
Expected learning outcomes	According to the National Curriculum for Preschool Education, preschool curriculum needs to be integrated, developmental, humanistic, constructivist and co-constructivist. Learning outcomes refer to the overall personal development of a child, the development of key competences of lifelong learning, the development of research skills, creativity, active learning and problem solving skills and citizenship.
Assessment and awards	None
Progression routes	Primary education
Labour market	N/A
Quality assurance	
Example	N/A

programmes. The National Curriculum for Early and Preschool Education and Care defines the principles, values, educational goals and expected learning outcomes of the preschool education.

Rules on the content and duration of preschool preparation programme, adopted in 2014, define the content and duration of the preschool preparation programme, obligatory for all 6-year-old children who are not enrolled into regular preschool programmes. The rules also define the key competences that a child needs to develop in the year before entering primary education.

2.1.2 Primary Education

Primary education lasts eight years and, as a rule, is compulsory for all children between the ages of six/seven and fifteen (exceptionally, up to age of 21 for students with disabilities). Its purpose is to enable students to achieve competencies necessary for living and for further education. Classes in primary schools are conducted according to the Curriculum for Primary Schools (Official Gazette, No. 66/19), in regular public schools as well as in private schools. Waldorf and Montessori primary schools in Zagreb and Rijeka conduct classes according to an alternative curriculum, while *Matija Gubec* primary school in Zagreb implements the IB MYP programme (an international syllabus) along with the regular primary school curriculum.

The drop-out rate in primary education has been decreasing. Regarding early school leaving, the analysis from 2022 shows that the Republic of Croatia is in first place in Europe with 2.4%, compared to the EU average. Compared to the analysis from 2013, this percentage was higher (3.7%), but still low compared to the EU average. In Croatia, there is a small number of students who leave their education early and the reasons for this are related to poverty, personal or family problems, learning difficulties, socio-economic situations, health problems or students realize that it was not the right choice for them (type or programme level). Also, the labour market dictates the need for a certain level of qualifications (people with low qualifications are more likely to be unemployed).

Legislation in the field of primary education:

Primary and Secondary School Education Act (Official Gazette, No. 87/08, 86/09, 92/10, 105/10, 90/11, 5/12, 16/12, 86/12, 126/12, 94/13, 152/14, 07/17, 68/18, 98/19, 64/20, 151/22, 156/23);

Act on ETTA (Official Gazette, No. 85/06, 151/22).

Education strategies and other related documents:

National Pedagogical Standard for Primary Education (Official Gazette, No. 63/08, 90/10);

Decision to Adopt Curriculum for Primary Schools (Official Gazette, No. 66/19).

Main governing bodies:

MSEY is the policy body responsible for planning, funding and monitoring of the overall education system. MSEY is responsible for administrative and other activities related to primary education, ensuring financial and material conditions for work.

Public schools are entirely financed by the State Budget, while private schools are co-financed by the State Budget on the basis of criteria prescribed by the Minister of Education and of results of external evaluation. Private schools providing alternative education programmes are co-financed up to 80 % by the State Budget.

ETTA is a public institution responsible for the provision of professional and advisory support in the area of general education in Croatia, including primary level.

Table 2.2: Structure and key aspects of primary education.

Entry requirements	Compulsory for children of the age of 6 by March 31st of the current year. Fulfilment of entry requirements is determined by education and medical experts in schools and is based on individual assessment of each student.
Education and training	Last for a period of 8 years; Providers of the programmes are accredited public and private primary schools.
Financing	Public and private
Teachers' qualifications	Higher education second cycle qualifications in different subjects
Expected learning outcomes	Defined in the Curriculum for Primary Schools as well as in the subject specific Curricula.
Assessment and awards	Upon completion of primary school, students are awarded a certificate of completion *(svjedodžba o završenom osmom razredu)*.
Progression routes	Students, as well as adult participants, holding this certificate can enter secondary education.
Labour market	N/A
Quality assurance	Education, assessment and awards are ensured by internal and external quality assurance systems (MSEY, ETTA, NCEEE).
Example	N/A

Since the previous report, a comprehensive curricular reform was introduced into the Croatian educational system. New curricula based on outcomes were introduced for all school subjects, as well as cross-curricular topics. MSEY is in charge of and is responsible for the education reform, envisioned in the 2014 Strategy of Education, Science and Technology. The Expert working group for curricular reform implementation (EWG) was established with the main task of preparing a draft of the Framework for the National Curriculum as well as the implementation of the whole process of education reform and development of a coordinated methodological approach to the preparation of all curricular documents.

The reform introduced a change in the pre-tertiary education and it includes a change of curricula (with learning outcomes approach) and focuses also on the continuous professional development of teachers, investments in infrastructure and school equipment thus emphasizing the role of education agencies responsible for teacher training and professional development. The education reform has focused on: the development of core competences for lifelong learning, clearly defined educational outcomes, open systems of methodology and didactics providing professionals in early childhood and pre-school education, teachers, children and students with the freedom to choose content, methods and forms of work and clearly defined standards/criteria for the assessment and evaluation.

Reformed curricula were adopted in 2019 and have been implemented in all grades since 2022. Training and support materials have been developed to help teachers implement new elements such as learning outcomes, different types of assessment and teaching transversal themes. All relevant stakeholders, i.e., teachers, parents, students, school leaders, scientific community/researches as well as the ministry, education agencies, local authorities, teacher unions have participated in the education reform thus participating in the designing, reviewing and implementing of the curriculum framework.

Both National Development Strategy (NDS) and the Recovery and Resilience Plan (RRP) concentrate on improving education outcomes in primary school by introducing all-day schooling and by increasing the instruction time. NDS goals include development of comprehensive support for students at risk as well as attracting quality teachers. The RRP aims to support the continuing comprehensive education reform in order to improve students' basic skills. It will provide required funding for infrastructure investments in order to increase the number of schools necessary for introducing the all-day schooling. A related reform introduces national exams in primary schools as well.

Sources and reference documents:

- *National Development Strategy 2030 of the Republic of Croatia until 2030* is available here
- *National Plan for the Development of Education System for the period until 2027* is available here
- *National Recovery and Resilience Plan 2021-2026* is available here
- *Strategy for Education, Science and Technology* is available here
- The Expert working group for education reform is available here
- Curricular documents are available here and here.
- *Decision to Adopt Curriculum for Primary Schools* is available here
- *Decision to Adopt Curriculum for Grammar Schools* is available here.

In the period from 2019, subject curricula for all obligatory subjects for elementary and grammar schools (gimnazija), as well as subject curricula for general subjects for vocational secondary school at level 4.2. Curriculums of 7 cross-curricular topics were developed.

The learning outcomes of the curricula of cross-curricula topics are either directly embedded in the relevant subject curricula or are achieved through the planning and implementation of the school curriculum (curriculum at the level of education provider).

The National Plan for the Development of Education and Training until 2027 and The Whole-Day School Model (WDS) whose objective is **improving the educational outcomes of students in the primary and general secondary education system** is aimed at infrastructural and organisational adaptation of the system and preparation of schools for the introduction of the whole-day school, enrichment and extension of the total duration of the school day, improvement of the curriculum and teaching practices, improvement of the working conditions of teachers and expert associates that encourage better learning outcomes and greater efficiency and improvement of professional development.

2.1.3 Secondary Education

This chapter contains information on:

- Legislation related to secondary education (general, vocational and art education)
- Institutions in secondary education (general, vocational and art education)
- Programmes (qualifications) in general, vocational and art education
- Quality assurance processes
- Developments in secondary education from the last report

Secondary education enables everyone under equal conditions and according to their abilities, to acquire competencies for entering the labour market and continuing their education at universities after completing primary education.

Legislation related to secondary education:

The legislative regulation related to secondary education, i.e., the number of legal frameworks, remained the same with certain changes and additions during the ten-year period and the by-laws were changed in accordance with them. As a new legal regulation, in 2013, the CROQF Act (Official Gazette, No. 22/13, 41/16, 64/18, 47/20, 20/21) was adopted. It establishes the CROQF and determines the connection of the CROQF with EQF and QF-EHEA and indirectly with the national qualification systems of other countries.

Regarding early school leaving, the analysis from 2022 shows that the Republic of Croatia is in first place in Europe with 2.4%, compared to the EU average. Compared to the analysis from 2013, this percentage was higher (3.7%), but still low compared to the EU average. In Croatia, there is a small number of students who leave their education early and the reasons for this are related to poverty, personal or family problems, learning difficulties, socio-economic situations, health problems or students realize that it was not the right choice for them (type or programme level). Also, the labour market dictates the need for a certain level of qualifications (people with low qualifications are more likely to be unemployed).

National education strategies and other related documents (2014 – 2023):

Education, Science and Technology Strategy (Official Gazette, No. 124/14)

VET Development Programme 2016 – 2020 (September 2016)

National curriculum for VET (Official Gazette, No. 62/18)

National Development Strategy of the Republic of Croatia until 2030 (Official Gazette, No. 13/21)

National Recovery and Resilience Plan 2021 –2026 (July 2021)

National Education System Development Plan until 2027 (33/23)

Types of institutions in secondary education

Depending on the type of educational programme there are **three types of secondary schools** in the Republic of Croatia: grammar schools, VET schools and art schools. Their founders can be individuals, cities, counties, legal entities, the Republic of Croatia, religious communities and associations.

Grammar schools provide education in the programs of general grammar school, language grammar school, science grammar school, science and mathematics grammar school, classical grammar school and the international IB programme. In the period from the school year 2011/2012 to the school year 2023/2024, the number of students in grammar schools decreased by 0.8 %. All mentioned grammar school programmes lead to the same qualification at the CROQF level 4.2. When the students pass the State Matura, which is compulsory, the qualification is completed.

Art schools provide education in musician-secondary education, musician-preparatory education, fine art and design programmes and ballet-dance programmes. In the period from the school year 2011/2012 to the school year 2023/2024, the number of students in art schools increased by 0.6 %. All art schools provide acquiring CROQF level 4.2. after finishing a final exam in order to complete 4.2. qualification. Art schools provide the same qualification as grammar schools or VET schools.

VET schools provide education in a five-year vocational programme (nurse for general care; level 4.2 CROQF), four-year vocational programs (level 4.2 CROQF), three-year (level 4.1 CROQF), two-year vocational programs for obtaining a lower level of education (level 3 CROQF) and in vocational programs for students with disabilities (CROQF levels 4.2, 4.1 and 3). In the period from the school year 2011/2012 to the school year 2023/2024, the number of students in VET schools increased by 0,1 % (70 %). In VET, students still have the greatest interest in four-year education programmes (65,5 %), followed by three-year education programmes (28,5%) and others.

If grammar school and VET are compared, 70% of students are enrolled in VET and 30% of students are enrolled in grammar schools.

Vocational programs for students with disabilities can be adapted programs for acquiring a lower level of education (CROQF level 3 - e.g. administrator), secondary level of education (CROQF level 4.1 - e.g. carpenter and CROQF level 4.2 - e.g. economist) and special programs for acquiring a lower level of education (CROQF level 3 - e.g. assistant baker). All students of adapted and special programs for students with disabilities acquire a comprehensive qualification. Adapted programs lead to the same qualifications as the above-mentioned vocational programs at CROQF levels 4.2, 4.1 and 3, while special programs are so-called programs for obtaining auxiliary qualifications.

The demographic decline from the school year 2011/2012 to the school year 2023/2024 affected on the number of students enrolled in secondary education. From the school year 2011/2012 to the school year 2023/2024 the number of secondary schools increased by 13, now there are 444 of them, but the number of students decreased by 29,848 to 148,833 (decrease by 18%).

General education in secondary schools (grammar school):

Grammar schools are four-year general education schools that students graduate from by completing the state graduation exam. In grammar school programs, students acquire general competences (knowledge and skills), which is a good basis for continuing their education at higher education institutions. Students who have completed grammar schools acquire a qualification at level 4.2 according to the CROQF.

From the school year 2011/2012 to the school year 2023/2024 the number of secondary schools that carry out grammar school programs increased by 3, now there are 183 and the number of students decreased from 54.154 students to 43.204. In the school year 2023/2024, 29.6% of students from the total number of secondary education students are enrolled in the grammar school.

Within the framework of the National Recovery and Resilience Plan 2021-2026 (2021) and the National Education System Development Plan until 2027 (2023), with the aim of improving general secondary education and modernizing VET, reform interventions are planned that include a higher rate of inclusion in grammar school programmes.

It is planned to increase the coverage of students in grammar school programmes in relation to VET schools from the existing 30 % to 35 % and to encourage enrolment in grammar school programs. That means ensuring support mechanisms (construction, extension and equipping) of high schools in order to increase the coverage of grammar school programmes including the associated school sports infrastructure, in accordance with complementary structural reforms through improvement normative and curricular framework.

Table 2.3: Structure and key aspects of general secondary education.

Entry requirements:	Primary school certificate (8 years of compulsory primary school), health and psychological conditions prescribed by curricula.
Education and training:	Lasts for four years; Programme providers are private and public secondary schools.
Financing:	Public and private
Teachers qualifications:	Higher education second cycle qualifications in different subjects.
Expected learning outcomes:	Defined in the National Curriculum Framework for Preschool, General Compulsory and Secondary School Education, and grammar school programmes.
Assessment and awards:	Schools providing education and training also perform an assessment. The assessment is internal and continuous, alongside final exams which are external (State Matura). Students are examined on 3 obligatory subjects (Croatian, Foreign Language and Mathematics) and optional subjects. Assessors at the schools are teachers and expert assistants. Upon completion of general secondary education programmes, students as well as adult participants are awarded with a certificate of completion (*svjedodžba o položenoj državnoj maturi*).
Progression routes:	Students holding this certificate of completion (*svjedodžba o položenoj državnoj maturi)* usually apply to higher education programmes (more than 90%).
Labour market:	Students holding a certificate of completion (*svjedodžba o položenoj državnoj maturi)* can enter the labour market.
Quality assurance:	Schools are established by local/regional self-government according to criteria set by MSEY and by private bodies. Education, assessment and awards are ensured by internal and external quality assurance systems (MSEY, ETTA, NCEEE).
Example:	*Maturant prirodoslovne gimnazije* Entry requirements: 8-year primary school, certificate of completion of primary school Education and training: Lasts for 4 years; Providers in Croatia are public and private secondary schools and adult education institutions (but not grammar schools in natural sciences) Assessment and awards: The assessment is internal and continuous, alongside final exams which are external (State Matura). Upon completion of a general secondary education programme (Prirodoslovna gimnazija), students as well as adult participants are awarded with a certificate of completion (*svjedodžba o položenoj državnoj maturi*) and the title *maturant prirodoslovne gimnazije*. Routes of progression after grammar school: Nearly all students holding this certificate of completion (*svjedodžba o položenoj državnoj maturi)* apply to university programmes. Labour market: These students do not usually enter the labour market. Quality assurance: MSEY, ETTA, NCEEE

Art Schools

Art education is available to everyone under equal conditions regardless of race, color, sex, language, religion, political or other belief, national or social origin, property, birth, social position, disability, sexual orientation and age, according to his abilities, and in accordance with the Act on Art Education (Official Gazette, 130/2011).

Secondary art education is provided according to the art curriculum and it lasts four years. Through secondary art education, students acquire competences (knowledge and skills) to work and continue

Table 2.4: Structure and key aspects of art schools.

Entry requirements:	For schools of music at the level of primary education: age 7; For schools of dance at the level of primary education: age 9; For schools of music at the level of secondary education: • Primary arts school certificate, or • 1-year preparatory programme for secondary schools of dance / 2-year preparatory programme for secondary schools of music. For the preparatory programme for secondary schools of dance: age 17. For the preparatory programme for secondary schools of music: age 15.
Education and training:	Arts schools include programmes in dance, music, visual arts, theatre etc. The dance programme (primary school) lasts four years. The music programme (primary school) lasts six years. Programmes in arts schools at the secondary level last four years. Providers are private and public schools/institutions.
Financing:	Public and private
Teachers qualifications:	Higher education second cycle qualifications in different subjects.
Expected learning outcomes:	Defined in the National Curriculum Framework for Preschool, General Compulsory and Secondary School Education, and grammar school programmes.
Assessment and awards:	Schools providing education and training also perform assessments. Assessment is internal and continuous, alongside final exams. Assessors at the schools are teachers and expert assistants.
Progression routes:	Students holding this certificate of completion apply to higher education programmes.
Labour market:	Students holding this certificate of completion may enter the labour market.
Quality assurance:	Education, assessment and awards are ensured by internal and external quality assurance systems (MSEY, ETTA, NCEEE).
Example:	Contemporary Dancer (Plesač suvremenog plesa) Entry requirements: 8-year primary school, certificate of completion of primary school 4-years of primary contemporary dance school OR 1-year preparatory programme of contemporary dance Education and training: Lasts for 4 years; Providers in Croatia are public art (dance or music) schools. Assessment and awards: Providers also perform an assessment. The assessment is internal, continuous and final. Students may also apply for external assessment (State Matura exams). Upon completion of the art programme students are awarded with a final certificate and the title Contemporary Dancers. Students can take State Matura exams in order to apply for higher education.

their education. Art schools are music, dance, visual arts and other schools that provide art programmes. Students who complete the art education curriculum at the secondary school level for a minimum of four years may also take the state graduation exam.

Students who have completed art schools acquire a qualification at level 4.2 according to the CROQF.

From the school year 2011/2012 to the school year 2023/2024 the number of art secondary schools increased and now there are 53, but the number of students decreased by 5.638 to 5.340. The current system of art schools in Croatia covers approximately 3.58 % of the total number of secondary education students.

VET schools:

VET is focused on the development of generic (key) competencies and competencies for the acquisition of qualifications with clearly defined learning outcomes and student achievements, as well as the acquisition of competencies for lifelong learning, while monitoring all values and development components of the economy and society.

In VET, 13 educational sectors were established (Mechanical engineering, shipbuilding and metallurgy; Electrical engineering and computing; Geology, mining, oil and chemical technology; Agriculture, nutrition and veterinary medicine; Construction and geodesy; Transport and logistics; Textiles and leather; Forestry and wood processing; Economy, trade and business administration; Tourism and catering; Graphic technology and audio-visual design; Personal, protection services and other services and Health and social care) as integrative areas of one or more professions. Each educational sector includes a group of curricula on the basis of which participants acquire knowledge, skills and competences in a narrower sense in a certain profile and to perform certain jobs in different professions.

70% of the total number of secondary education students are enrolled in VET. Looking at the sectors, in the school year 2011/2012 the most students were educated in qualifications from the educational sectors of Economy, trade and business administration (15.3%), Electrical engineering and computing (9.9%) and Tourism and hospitality (9.4%), while in the school year 2023/2024 the students were educated in the educational sectors of Economy, trade and business administration (11.9%), Electrical engineering and computing (11%) and Mechanical engineering, shipbuilding and metallurgy (9.6%).

VET schools carry out the education of students in VET programs that acquire knowledge, skills and competences for performing professional tasks. Students who have completed the two-year vocational programme acquire a qualification at level 3 of the CROQF. Students who have completed the three-year vocational programme acquire a qualification at level 4.1 of the CROQF. Students who have completed a four-year or five-year vocational programme acquire a qualification at level 4.2 of the CROQF. Completion of education in VET schools gives students the opportunity to join the labour market and offers certain conditions to continue their education at the secondary school level or in higher education.

All VET curricula include two parts: a general education part and a vocational part that is further divided into a professional-theoretical part and work-based learning.

To complete an IVET programme and receive a formal qualification, all learners must develop and present a final practical assignment (izradba i obrana završnog rada). Assessment is organised and conducted by VET schools. Upon passing it, a learner acquires a secondary school qualification and receives a certificate of completion (svjedodžba o završnome radu) from the VET school.

The Education, Science and Technology Strategy (2014) provided for the creation and adoption of the VET Development Programme 2016 – 2020 (2016) in order to harmonize VET with the needs of the labour market. The key strategic goals of the Programme relate to the development of qualifications based on competences and learning outcomes, continuous harmonization of VET with the labour market, the need to build a system of VET that enables lifelong learning and mobility, defining the role of teachers in the learning outcomes of an oriented system and the establishment of a quality assurance system.

Therefore, the National curriculum for VET (2018) was adopted, the Act on VET was amended, new VET curricula for the acquisition of qualifications based on competences and learning outcomes were introduced into the regular system of VET, regional centers of competence were appointed as places of excellence in VET, new national model of competition and reviews in all sectors was introduced, the capacities of teachers and mentors at employers have been strengthened and the mobility of students and teachers has been promoted.

In accordance with the National Development Strategy of the Republic of Croatia until 2030 (2021), National recovery and resilience plan 2021 –2026 (2021) and National Education System Development Plan until 2027 (2023), the Republic of Croatia continues the reform of VET by strengthening the relevance of VET, improving the quality of VET and raising the attractiveness and internationalization of VET, which means developing and supporting the introduction of new modular and outcome-oriented curriculum documents, providing support mechanisms for continuing the implementation of work-based learning in the world of work, by strengthening regional centers of competence for the implementation of VET and further raising the visibility and attractiveness of VET. Also, the development and implementation of curriculum documents (sectoral curricula, VET curricula and curricula of VET schools) continues in accordance with the developed Methodology for creating sectoral curricula, VET curricula and curricula of VET schools. The sectoral curriculum is a framework that includes all VET curricula that enable the acquisition of qualifications at levels 2 to 5 of the CROQF of one educational sector and the associated units of learning outcomes from the qualification standards. VET curriculum is adopted on the basis of one or more qualification standards that are created on the basis of one or more occupational standards in accordance with the concept of the CROQF, it acquires key and vocational competencies and defines the rules and methods of acquiring qualifications. The curriculum of the VET school is drawn up and adopted by the VET school and it elaborates in detail the educational process by which qualifications are acquired at levels 2 to 5 of the CROQF in that school and it is drawn up on the basis of sectoral and VET curricula. The new reform aims to reduce the large number of existing VET programs, conducted according to different education models and align them with the needs of employers. This would expand the range of possibilities so that a certain qualification could meet the needs of performing tasks in different workplaces within the labour market, which require rapid changes and adaptation of these qualifications with a special emphasis on the digital and green transition.

Table 2.5: Structure and key aspects of two-year vocational programmes for obtaining a lower level of education (level 3 CROQF).

Entry requirements:	Primary school certificate (8 years of compulsory primary school), health and psychological conditions prescribed by curricula according to the law.
Education and training:	VET programmes last two years. Providers of the programmes are public and private VET schools/institutions/ organisations and adult education institutions/organisations.
Financing:	Public and private
Teachers qualifications:	Higher education second cycle qualifications in different subjects
Expected learning outcomes:	Every curriculum has defined tasks which describe the knowledge and skills students should acquire according to the relevant curriculum. According to the VET Act, curricula are based on learning outcomes.
Assessment and awards:	Schools providing education and training also perform assessments. Assessors are school teachers, assessment is provided continuously throughout the duration of the relevant programme. Upon completion of VET programmes and successful completion of the final exam, students are awarded with a final certificate.
Progression routes:	Students have the option of continuing their education at a higher qualification level (three-year vocational programs for industry and crafts at level 4.1 CROQF).
Labour market:	Vocational programs of two-year duration of education are focused on less complex professions and are similar to three-year programs in terms of organization and method of execution, with a smaller share of general education and vocational-theoretical content from a specific field, but with an emphasis on acquiring essential practical skills for performing less demanding jobs and work homework in order to prepare the student for work in a certain profession.
Quality assurance:	Schools are established by local/regional self-government according to criteria set forth by MSEY and by private bodies. VET curricula are prescribed by the MSEY at the proposal of AVETAE. Education, assessment and awards are ensured by internal and external assurance systems. According to the VET Act, VET institutions are obliged to conduct self-evaluation and external evaluation. Self-evaluation is conducted for the following relevant fields: planning and programming of the work, teaching and support to learning, participants' accomplishments, material conditions and human resources, professional development of the staff, human relations in VET institutions, administration and management, and cooperation with other stakeholders. Self-evaluation of the VET institution is monitored and evaluated by the Committee for Quality which is nominated by the managing body of the VET institution. Ways and procedures for election of members to the Committee for Quality are determined by the statute of the VET institution. External evaluation is conducted by the NCEEE.
Example:	*Parquet manufacturer (proizvođač parketa)* Entry requirements: 8-year primary school, certificate of completion of primary school Education and training: Lasts for 2 years; Providers in Croatia are public and private VET schools and adult education institutions. Assessment and awards: Upon completion of the VET programme, students as well as adult learners are awarded with a final certificate and the title of *parquet manufacturer.*

Table 2.6: Structure and key aspects of three-year vocational programmes for industry and crafts (level 4.1 CROQF).

Entry requirements:	Primary school certificate (8 years of compulsory primary school), health and psychological conditions prescribed by curricula according to the law.
Education and training:	VET programmes last three years. Providers of the programmes are public and private VET schools and adult education institutions.
Financing:	Public and private
Teachers qualifications:	Higher education second cycle qualifications in different subjects
Expected learning outcomes:	Every curriculum has defined tasks which describe the knowledge and skills students should acquire according to the relevant curriculum. According to the VET Act, curricula are based on learning outcomes.
Assessment and awards:	Schools and employers (craft, industry and legal entities) providing education and training also perform assessments. Assessors are school teachers and mentors of employers, assessment is provided continuously throughout the duration of the relevant programme. Upon completion of VET programmes and successful completion of the final exam, students are awarded with a final certificate. Students who are educated in apprenticeships (42 programs) also take an apprenticeship exam, which is an integral part of the final exam.
Progression routes:	Students have the option of continuing their education at a higher qualification level (four-year vocational programmes at level 4.2 CROQF) Students who have completed their apprenticeship can apply for a Master Craftsman Exam (after 2 years of work experience) with the Croatian Chamber of Crafts.
Labour market:	Vocational programs lasting three years of education prepare students for work in industry, economy and craftsmanship with the primary goal of preparing students for work in a specific occupation, with an emphasis on rapid inclusion in the labour market. They contain a relatively high proportion of professional and theoretical content from a certain field, along with the acquisition of practical skills. The practical part of the programme is realized for the most part in the work process, at the employer and to a lesser extent in VET school.
Quality assurance:	Schools are established by local/regional self-government according to criteria set forth by MSEY and by private bodies. VET curricula are prescribed by MSEY at the proposal of AVETAE. Education, assessment and awards are ensured by internal and external assurance systems. According to the VET Act, VET institutions are obliged to conduct self-evaluation and external evaluation. Self-evaluation is conducted for the following relevant fields: planning and programming of the work, teaching and support to learning, participants' accomplishments, material conditions and human resources, professional development of the staff, human relations in VET institutions, administration and management, and cooperation with other stakeholders. Self-evaluation of the VET institution is monitored and evaluated by the Committee for Quality which is nominated by the managing body of the VET institution. Ways and procedures for election of members to the Committee for Quality are determined by the statute of the VET institution. External evaluation is conducted by the NCEEE. AVETAE is responsible for the process of external evaluation of the implementation of the apprenticeship exam in the apprenticeship.

Example:	*Chef (kuhar)* Entry requirements: 8-year primary schools, certificate of completion of primary school Education and training: Lasts for 3 years; Providers in Croatia are public and private VET schools and adult education institutions. Assessment and awards: Providers also perform assessments. Assessment is internal, continuous and final. Upon completion of the VET programme students as well as adult learners are awarded with a final certificate and the title of chef.

Table 2.7: Structure and key aspects of four-year vocational programmes (level 4.2 CROQF) and five-year vocational programme (nurse for general care; level 4.2 CROQF).

Entry requirements:	Primary school certificate (8 years of compulsory primary school), health and psychological conditions prescribed by curricula according to the law.
Education and training:	VET programmes last four or five years. Providers of these programmes are public and private VET schools and adult education institutions.
Expected learning outcomes:	Every curriculum has defined tasks which describe the knowledge and skills students should acquire according to the relevant curriculum. According to the VET Act, curricula are based on learning outcomes.
Financing:	Public and private
Teachers qualifications:	Higher education second cycle qualifications in different subjects
Assessment and awards:	Schools providing education and training also perform assessments. Assessors are school teachers. Assessment is provided continuously throughout the duration of the relevant programme. Upon completion of VET programmes and successful completion of the final exam, students are awarded with a final certificate. Students having spent four years (or 5 years for regulated profession) at vocational schools also have the option of taking the *State Matura* exam, which is an external assessment.
Progression routes:	Students who have this certificate as well as a certificate of the State Matura exams can apply for higher education.
Labour market:	Vocational programmes of four and five years of education contain a relatively high proportion of general education and vocational-theoretical content from a certain field, along with the acquisition of practical skills, in order to train students to perform the tasks of a certain occupation, but also to continue education at higher levels.

Quality assurance:	Schools are established by local/regional self-government according to criteria set forth by MSEY and by private bodies. VET curricula are prescribed by MSEY at the proposal of AVETAE. Education, assessment and awards are ensured by internal and external assurance systems. According to the VET Act, VET institutions are obliged to conduct self-evaluation and external evaluation. Self-evaluation is conducted for the following relevant fields: planning and programming of the work, teaching and support to learning, participants' accomplishments, material conditions and human resources, professional development of the staff, human relations in VET institutions, administration and management, and cooperation with other stakeholders. Self-evaluation of the VET institution is monitored and evaluated by the Committee for Quality which is nominated by the managing body of the VET institution. Ways and procedures for election of members to the Committee for Quality are determined by the statute of the VET institution. External evaluation is conducted by the NCEEE.
Example:	*Technician for mechatronics (Tehničar za mehatroniku)* Entry requirements: 8-year primary school, certificate of completion of primary school Education and training: Lasts for 4 years; Providers in Croatia are public and private VET schools and adult education institutions. Assessment and awards: Providers also perform an assessment. The assessment is internal, continuous and final. Students may also apply for external assessment (State Matura exams). Upon completion of the VET programme students as well as adult learners are awarded with a final certificate and the title of technician for mechatronics. Students can take State Matura exams in order to apply for higher education.
Example:	*Nurse for general care (Medicinska sestra opće njege/medicinski tehničar opće njege)* Entry requirements: 8-year primary schools, certificate of completion of primary school Education and training: Lasts for 5 years; Providers in Croatia are public and private VET schools. Assessment and awards: Providers also perform assessments. The assessment is internal, continuous and final. Students may also apply for external assessment (State Matura exams). Upon completion of the VET programme students are awarded with a final certificate and the title *nurse for general care*. Students can take State Matura exams in order to apply for higher education.

Quality assurance in secondary education

The Education, Science and Technology Strategy (Official Gazette 124/2014), together with the Vocational Education and Training System Development Programme 2016 –2020 (Decision on the adoption of the Vocational Education and Training System Development Programme 2016 –2020, Government of the Republic of Croatia, 2016) and the Vocational Education Act (Official Gazette 30/2009, 24/2010, 22/2013, 25/2018, 69/2022) forms the strategic and legislative framework for the development of the system of ensuring the quality of vocational education.

The implementation of the self-evaluation process in vocational education institutions began in 2012. The Vocational Education Act defines that the national system of quality assurance of vocational education is linked to the European system of quality assurance in vocational education and training (EQAVET).

In accordance to the VET Act, VET schools are obliged to conduct self-evaluation and participate in the external evaluation process. The self-evaluation of the VET school is monitored and evaluated by the Quality Committee of that institution. For the operational implementation of the self-evaluation process in the VET school, the school principal appoints a school's self-evaluation team. The school's self-evaluation team prepares a self-evaluation report and submits it to the Quality Committee for approval.

In the process of self-evaluation, VET schools independently and with full responsibility assess the quality of their work with the aim of systematic improvement. Self-evaluation takes place during the school year and schools carry it out for the following priority areas: work planning and programming, teaching and learning support, student achievements and learning outcomes, material conditions and human potential and professional development of the institution's employees, cooperation within the vocational education institution and cooperation with other stakeholders and promotion of the institution and management (institution and quality). Each priority area is divided into several quality areas that are described by quality criteria. According to the quality criteria, schools evaluate their level of success in the implementation of the educational process and plan to improve their work.

Vocational education institutions draw up a self-evaluation report on the self-evaluation process and plan and implement improvements to their work based on the results of the self-evaluation process. In the self-evaluation process, schools use the e-Quality online self-evaluation tool, the self-evaluation manual with guidelines for self-evaluation, and the self-evaluation methodology of vocational education institutions.

In 2018, the e-Quality online tool was improved, based on feedback from stakeholders, secondary vocational schools. In 2020, AVETAE adopted the Self-Evaluation Methodology of Vocational Education Institutions. In the period 2015 – 2023, with the support of the Erasmus+ EQAVET NRP project, additional tools and instruments were developed to support schools in the implementation of the self-evaluation process (available at: www.qavet.hr).

The Ordinance on the advancement of teachers, professional associates and principals in primary and secondary schools and student dormitories (Official Gazette 68/2019, 60/2020, 32/2021) introduces criteria related to work as part of evaluation, self-evaluation and external evaluation, which recognizes the role of the Quality Committee, the school self-evaluation team and the self-evaluation coordinator. Amendments to the Vocational Education Act defined two bodies in the implementation of the self-evaluation process at the school level, the Quality Committee and the school self-evaluation team. The school's self-evaluation is monitored and evaluated by the Quality Committee appointed by the management body of the vocational education institution. A school self-evaluation team is appointed for the operational implementation of the self-evaluation process at the school level.

AVETAE is involved in the development and improvement of the quality assurance system, and provides continuous support to vocational schools in the implementation of the self-evaluation process, and provides the main recommendations for encouraging the development of internal quality assurance. Also, AVETAE participates in the work of the EQAVET network and is the national reference point for ensuring the quality of vocational education and training in Croatia (QAVET.HR).

In addition to the above, AVETAE carries out the following activities: continuous advisory support to schools in the implementation of the self-evaluation process; implementation of professional training for quality commissions and school self-evaluation teams; monitoring the implementation of the self-evaluation process - self-evaluation reports; visits to schools with the purpose of support; reporting on the self-evaluation process.

The National Centre for External Evaluation of Education (NCEEE) administers the State Matura exams in cooperation with upper secondary schools. Exams have three objectives: final examination and requirement for graduation from general upper secondary schools; entrance exams for undergraduate studies at tertiary level for all learners (including VET graduates); and external evaluation of learner competences. State Matura exams are administered in general education subjects only, as obligatory and optional exams. Croatian language, mathematics and foreign language exams are obligatory, and they may be taken at A (advanced) and B (elementary) level. The list of optional exams is determined by the NCEEE, based on input from higher education institutions, for each school year. Higher education institutions set their admission criteria independently, including the level and optional exams required.

Developments in secondary education from the last report

Curricula for grammar schools

In the 2019, subject curricula for all obligatory subjects for grammar schools (gimnazija), as well as subject curricula for general subjects for vocational secondary school at level 4.2. Curriculums of 7 cross-curricular topics were developed.

The learning outcomes of the curricula of cross-curricula topics are either directly embedded in the relevant subject curricula or are achieved through the planning and implementation of the school curriculum (curriculum at the level of education provider).

Regional Centers of Competence

In July 2018, 25 regional centers of competence in VET were appointed and re-appointed in 2023.

Regional Centers of Competence (RCC) are conceived as places of excellence in VET where regular VET programs, professional development and lifelong learning, as well as other forms of formal and informal education are implemented.

When establishing RCCs, the focus was on (sub)sectors: tourism and hospitality, mechanical engineering, electrical engineering and computing, agriculture and healthcare

The foundation of RCC is based on innovative learning models, the excellence of teachers and mentors at employers, high-quality infrastructure, cooperation with social partners, the public sector and economic entities.

RCCs are oriented towards students, adult participants, teachers and mentors at employers, employed and unemployed who will be enabled to acquire competences, persons with disabilities and students with difficulties.

RCC, as multifunctional institutions, will provide education with a special emphasis on work-based learning, increasing practice through close cooperation with employers and will also implement various training programs, professional development programs and other activities that contribute to the improvement the quality of VET and its adaptation to the needs of the economy and the labour market.

Cooperation with employers is encouraged in several ways:

1. involving employers in the creation of curriculum documents, primarily occupational standards, in order to express their needs by defining the tasks of a particular occupation, as well as the necessary competencies that the future occupation needs to perform these tasks

2. by strengthening the capacity of employers and their mentors to teach students on work-based learning that takes place at the employer

3. participation of the economic sector in the promotion of student competencies and VET through vocational competitions and examinations of VET school students (Worldskills Croatia)

In the next period, regional centers of competence for the implementation of VET will continue to be strengthened in the following way:

- support for networking with partner institutions and economic entities

- developing mechanisms for connecting RCC with the European platform of centers of excellence

- raising quality and competitiveness at the local/regional level.

Promotion of vocational education through the new competition framework

Developed throughout 2018-19, and inspired by EuroSkills and WorldSkills Competitions, a new model of VET student competitions introduced improvements to meet the challenges, skills and competitions of VET. These included the relevance of skills and test project design, competitor assessment, visibility, involvement of employers, and the unexploited potential for career guidance, job recruitment and the promotion of VET skills and occupations.

The new model streamlines the skills covered to include all VET sectors. Employer input, technical descriptions and test projects have been developed for each of the 40 skills, which are now more closely aligned to vocational curricula taught in schools, as well as the latest industry standards. As a major shift from the previous design, the new competition places practical skills in the spotlight, eliminating all theoretical examination and encouraging teamwork. The new model also improves competition transparency and impartiality through early publication of test projects, detailed assessment methods and a clear organisational structure.

First competition under new model and under a name WorldSkills Croatia took place in 2019. The WorldSkills Croatia competition showcased the talent and skills of IVET students, encouraging them to upskill and strive for professional excellence. Additionally, it highlighted the importance of VET teachers and schools in delivering quality education and learning experiences.

The main objectives of the WorldSkills Croatia competitions are to strengthen ties between VET schools, companies, and employers, encouraging investment in training and upskilling, improving employability of VET graduates, and raising awareness of companies' accountability regarding learning outcomes in VET.

Competitions were organised in 2021, 2022 and 2023 as largest skills competition in this part of Europe and a largest educational event in Croatia. They gather more than 1000 participants, including more than 350 competitors. Events attracted more than 20.000 visitors and gained support from more than

60 companies and institutions. Additionally, a nationwide media campaigns for the WorldSkills Croatia competition further promoted the attractiveness of VET as a career choice.

2.1.4 Postsecondary professional education and training

Postsecondary professional education and training in the Republic of Croatia is carried out as part of the adult education on pre-tertiary level.

As part of adult education it may include reskilling or retraining on levels 2 to 4.2. CROQF, vocational specialist training on level 5 or master's exam also on level 5 CROQF. Preconditions for reskilling and vocational specialist training are prescribed in educational programmes which are created by adult education institutions, and validated by AVETAE, and MSEY. Since postsecondary education in Croatia includes reskilling, upskilling or prequalification for new occupations, attending these programmes may lead to different qualifications or units of learning outcomes. Depending on the type of the programme, the participants may acquire full, partial qualification or micro-qualification i.e. units of learning outcomes on all levels (2-5 CROQF) - from grammar school programmes to different VET programmes. The entry requirements for each programme/qualification are prescribed by the programme itself, and they are validated by the AVETAE.

Adult education programmes for reskilling and vocational specialist training are regulated by the Adult Education Act (Official Gazette 144/21) which entered into force in January 2022, and its by-laws. The new legislative framework aligns the system of adult education with the CROQF Act (Official Gazette 22/13, 41/16, 64/18, 47/20, 20/21), while the methodology of creating the adult education programs is based on the regulations governing the CROQF. The inclusion of adult education institutions in the national system of qualifications is a significant shift towards the achievement of the main goals of all European contemporary societies - the system of lifelong learning and professional mobility in the wider European context. By entering the CROQF, institutions for adult education assume the responsibility of successful and high-quality implementation of educational activities, and only programs for which a real need or justification on the labour market is proven are implemented.

In addition to aligning with CROQF, a new legislative framework for adult education introduced **formal programmes for acquiring partial qualifications, microcredentials (microqualifications in Croatia), associated to credits, as well as introduction of the system for recognition of prior non-formal and informal learning** (validation programmes in Croatia).

Partial qualifications and microqualifications in adult education in Croatia refer to educational programmes, i.e., proofs of a possession of knowledge and skills acquired through a shorter period of time from levels 2 to 5 of EQF/CROQF (adult education in Croatia is carried out on pretertiary level and does not include higher levels of qualifications). Each new programme has direct connection with the competences and learning outcomes described in occupational standards and standards of qualification. Recognition of new programmes and acquired qualifications on the labour market is ensured through compliance with CROQF. New programmes and various possibilities of postsecondary professional education via shorter programmes opened new possibilities of horizontal and vertical mobility throughout the education system and more direct access to the labour market.

Recognition of prior non-formal and informal learning is intended for validation of knowledge and competences on levels 2 to 5 of CROQF. Skills and competences can be validated only according to CROQF.

Postsecondary professional education and training for crafts is within the competence of the Croatian Chamber of Trades and Crafts and it is regulated by *the Act on Trades and Crafts* (Official Gazette 143/2013, 127/2019). The Chamber of Trades and Crafts organizes and conducts Master craftsman exam. It is taken before the commission established by the Chamber for occupations on level 5 – which are listed in the *Ordinance on related and privileged trades and the method of issuing privileges* (Official Gazette 42/2008).

Table 2.8: Example of a structure and details of the education programme for acquiring a partial qualification in digital marketing – vocational specialist training.

1. **GENERAL INFORMATION ABOUT THE EDUCATION PROGRAMME FOR ACQUIRING A PARTIAL QUALIFICATION**	
Sector	Economy and trade
Programme name	Education programme for obtaining a partial qualification specialist in digital marketing / specialist in digital marketing
Programme type	vocational specialist training
Level of qualification/units of learing outcomes	**Level of qualification 5** LO 1: Planning a digital marketing strategy in business (level 5) LO 2: Design and analysis of web headquarters in the realization of digital business visibility (level 6) LO 3: The role of social networks in marketing and branding (level 6) LO 4: Application of e-mail marketing in business (level 5) LO 5: Content marketing (level 5)
Volume in CSVET credits	**12 CSVET** LO 1: Planning a digital marketing strategy in business (level 5) LO 2: Design and analysis of web headquarters in the realization of digital business visibility (level 6) LO 3: The role of social networks in marketing and branding (level 6) LO 4: Application of e-mail marketing in business (level 5) LO 5: Content marketing (level 5)

2. **Documents on the basis of which the education programme for the acquisition of qualifications/units of learning outcomes (micro-qualifications) was created**		
Occupational standard(s)OS/ units of competences(SC)/date for revision	**Qualification standard(s)QS/date for revision**	**Sector curriculum**
OS Web programming specialist / Web programming specialist https://hko.srce.hr/registar/standard-zanimanja/detalji/258 SC 1: Web page design https://hko.srce.hr/registar/skup-kompetencija/detalji/2171 Valid until: 31/12/2025 OS Technician for web interface design and development https://hko.srce.hr/registar/standard-zanimanja/detalji/130 SO 2: Identifying the type, purpose of the web solution and the target group of users https://hko.srce.hr/registar/skup-kompetencija/detalji/1134 Valid until 31/12/2024	**QS Digital marketing specialist** https://hko.srce.hr/registar/standard-kvalifikacije/detalji/149 Valid until 31/12/2027	

OS Assistant in marketing https://hko.srce.hr/registar/standard-zanimanja/detalji/21 SC 3: Online advertising of products and services https://hko.srce.hr/registar/skup-kompetencija/detalji/170 Valid until 01/10/2023 **OS Economic officer** https://hko.srce.hr/registar/standard-zanimanja/detalji/49 SC 4: Implementation of marketing activities in the implementation of business activities of small and medium enterprises https://hko.srce.hr/registar/skup-kompetencija/detalji/417 Valid until 31/12/2025		-
Entry requirements	Full qualification on minimum level 4.2 in the economy and trade sector or a completed education programme in the field of internet marketing	
Material conditions and learning environment that are necessary for the implementation of the programme	https://hko.srce.hr/registar/skup-ishoda-ucenja/detalji/5299 https://hko.srce.hr/registar/skup-ishoda-ucenja/detalji/5300 https://hko.srce.hr/registar/skup-ishoda-ucenja/detalji/5301 https://hko.srce.hr/registar/skup-ishoda-ucenja/detalji/5302 https://hko.srce.hr/registar/skup-ishoda-ucenja/detalji/5303	

Competencies acquired through the programme

1. apply digital marketing strategies in business
2. choose promotional activities in the implementation of the selected digital marketing strategy
3. use different channels of digital marketing in order to increase visibility in business
4. create an ad in accordance with different digital marketing channels
5. use tools for creating web design and web interface
6. design web headquarters in order to increase the efficiency of operations
7. create a responsive and adaptive design using the default visual identity
8. identify the type, purpose of the web solution and the target group of users
9. use social networks depending on the target group of users in order to increase visibility in business
10. communicate with colleagues and business clients in an online environment in order to increase business efficiency
11. adjust the user interface depending on the user experience feedback
12. create an e-mail campaign to strengthen digital communication in business
13. design content adapted for publication with regard to the chosen digital marketing channel
14. analyze success on different digital marketing channels in accordance with the planned goals

Date of revision of the programme	

2.1.5 Adult Education

Adult education in Croatia is part of the concept of lifelong learning. Formal adult education is recognized as part of the education system of the Republic of Croatia and is defined by the legal framework, whereby adult education is carried out as formal and informal education, and knowledge and skills are also acquired through informal learning. The Adult Education Act covers qualifications up to level 5 of the CROQF. Through adult education all full qualifications that are carried out in regular education system can be obtained, together with different partial qualifications, and micro-qualifications which are carried out only through adult education (so far). List of different programmes offered for participants of adult education can be found on the following link: https://www.asoo.hr/obrazovanje/obrazovanje-odraslih/metodologija-izrade-programa-obrazovanja-odraslih/.

National Development Strategy of the Republic of Croatia until 2030 in its second strategic goal "Educated and employed people", particularly emphasizes work on quality in adult education, as well as activities aimed at increasing involvement in lifelong learning processes, stating that in the coming period, "raising the quality of adult education programmes and by increasing the share of the adult population that participates in the processes of lifelong learning in order to increase the productivity and quality of the workforce and the ability to adapt to rapid changes."

Formal adult education programmes have undergone a complete transformation and the establishment of a more flexible and dynamic way of their creation and implementation linked to the CROQF. Although adult education programmes in the Republic of Croatia have been developed since 2012 based on a methodology based on learning outcomes, and thus the adult education system and adult education institutions (providers of adult education services), over a period of almost eight years, have made good preparation for changes which were followed by the adoption of new Adult Education Act (2021). In the mentioned period, there were some programmes that were created based on occupational standards and qualification standards, but a large part of programmes were not aligned with the standards, and some of them were outdated because in that period they did not necessarily have to be aligned with the qualification standards. From 2021, with the entry into force of the new Adult Education Act (Official Gazette 144/2021) the preconditions for the full implementation and connection of formal adult education programmes with the CROQF have been created.

Adult education programmes according to this law include programs at levels 1, 2, 3, 4, 4.1 and 4.2 and at level 5 of the CROQF. Article 12 of the Adult Education Act, paragraphs 5 and 6, prescribes that the education programme through which a qualification is obtained, or a unit of learning outcomes must be compliant with the standard of qualifications from the CROQF Register. The adult education provider is obliged within three or six months, depending on the type of programme, from the day of registration or change of the units of learning outcomes or qualification standards in the CROQF Register to align the education programmes with the standard of qualifications or unit of learning outcomes in the the CROQF Register. The complete and mandatory linking of programme creation with the standards from the CROQF Register ensures the long-term quality of their creation, continuous alignment with the needs of the labour market or personal development of the individual with the aim of upgrading or acquiring new knowledge and skills. The law also provided for a transitional period of three years from the entry into force of the new law, so that programmes based on old approvals can also be carried out, but already the vast majority of adult education programmes are aligned with the CROQF register. With the entry into force of the Ordinance on Standards and Norms for the Implementation of Adult Education Programmes (Official Gazette, No. 14/23), adult education institutions can, from February 2023, prepare and obtain approval only for programmes that are aligned with the CROQF Register.

In addition to the regulations that define the new framework for creating, harmonizing and implementing adult education programmes that are under the jurisdiction of MSEY, a number of support activities have been introduced, so the CROQF would be applied in practice. AVETAE created a new Methodology for creating adult education programmes, a series of exemplary programmes based on units of learning outcomes from the CROQF register and a series of professional training was conducted (with 550 participants, Source: Annual Report, 2022 ASOO, pp. 21 and 22) for directors of institutions and andragogic employees (andragogic managers and teachers) related to the development of programmes based on the new methodology and topics related to occupational standards and qualification standards.

Quality assurance in adult education

The complete system of quality assurance in adult education was established by the adoption of the new Adult Education Act (Official Gazette 144/2021). According to this law, the quality assurance system in adult education includes an internal and external quality assurance system. The internal quality assurance system is established by the institution itself, and as part of that system, it regularly carries out a self-evaluation process. The effectiveness of the internal quality assurance system and the regularity of the implementation of the self-evaluation process are checked in the external evaluation process. The quality assurance system of institutions is established by continuous evaluation of students, institutions, educational programmes and their implementation through the following procedures: self-evaluation of institutions; external evaluation; evaluation of the implementation of education programmes and evaluation programmes; external evaluation of learning outcomes of students; inspection, professional and administrative supervision over the work of the institution; monitoring the work of institutions through the National Adult Education Information System.

Institutions for adult education carry out self-evaluation on the basis of guidelines and tools for self-evaluation adopted by AVETAE.

External evaluation of institutions for adult education is carried out by AVETAE. Pursuant to the Ordinance on the method of external evaluation of adult education institutions and units of learning outcomes, as well as the method of work and appointment of the committee for objections to the report on external evaluation (Official Gazette 19/2023), institutions are subject to external evaluation every five to seven years based on the Annual Plan for the Implementation of External Evaluation of Institutions or at the institution's request. In addition to AVETAE, the following participate in the external evaluation of institutions: the expert commission for the implementation of the external evaluation of the institution, the council for expert opinion on the conducted procedure of the external evaluation of the institution, and the committee for objections to the report on the external evaluation of the institution. In the process of external evaluation of the institution, the expert committee for the implementation of the external evaluation of the institution visits the institution, and upon completion of the visit to the institution, submits a report on the external evaluation of the institution. The Council for Expert Opinion on the Institution's External Evaluation Procedure delivers an opinion on the institution's external evaluation procedure. AVETAE issues a report on the external evaluation of the institution, which includes a proposal for an assessment of the institution's quality level, as well as a decision on the assessment of the quality level. In the event that the institution previously objected to the report, the committee for objections to the report on the external evaluation of the institution decides on its merits.

Quality areas and quality standards in adult education were adopted by AVETAE. There are a total of 18 quality standards grouped into five areas: institution management and quality assurance system; educational programmes, learning and teaching; student achievements and student care; human and material resources; informing the public, communication and cooperation, integrity and ethics.

As an integral part of the quality assurance system in adult education, the new Adult Education Act also introduced external evaluation of units of learning outcomes. External evaluation of units of learning outcomes is an independent evaluation procedure carried out by independent examiners or groups of examiners who check the adoption of units of learning outcomes of participants and/or applicants, and is under the jurisdiction of AVETAE. External evaluation of units of learning outcomes of participants can be carried out during the defence of the final paper and the final examination as part of the education programme or the examination of learning outcomes as part of the evaluation programme, except for programs that, based on other regulations, end with a special external evaluation procedure.

2.1.6 Higher education

- **Overview**

The main law in the Republic of Croatia that regulates higher education and scientific activity is the Act on Higher Education and Scientific Activity, adopted in 2022. It followed the Act on Scientific Activity and Higher Education, adopted in 2003 (with 12 amendments) which, as time passed, was recognized as an ineffective legislative framework without further possibility to meet the real needs of the academic community and society as a whole, which was a basic indicator of the need for the creation of a new legal framework.

In accordance with the National Development Strategy, a prerequisite for improving higher education was the adoption of a new legal framework that defines and expands the models of public and private financing, quality assurance and management in higher education institutions. New legal framework creates a basis for the implementation of measures that better connect the needs of the labour market, economy and society as a whole with the system of higher education, but also emphasizes the social role of higher education and higher education institutions. A special emphasis is placed to encourage lifelong learning of persons on the labour market of all age groups and to acquisite relevant skills through practical work and professional practice as part of the formal education. Professional guidance activities develop along with monitoring of employability of a person with qualifications. The focus is on promoting inclusion and student-centered approach which enables flexibility in teaching methods, creativity, innovation and implementation of the learning and teaching process based on the individual characteristics of students as well. The scholarship system is improved, which, based on the principles of meritocracy, encourages excellence and research work, and make studying more accessible for students with lower social status. Internationalization of higher education is encouraged by connecting higher education institutions through alliances of European universities and facilitating the mobility of students and teachers.

Also, in the field of science and research, the main goals of the new law are increasing investments in order to create knowledge, spread ideas, innovations and their successful commercialization, modernizing the legislative framework that regulates the academic scientific research sector. Increasing investment in science, research and development should strengthen scientific excellence and research that brings innovation and encouragement of open science and its cooperation with the business sector.

The main goal of passing the new law is to modernize the system of higher education and scientific activities, to strengthen its institutional capacities and harmonize its characteristics with the adopted principles and tasks of the European Higher Education Area (EHEA), European Education Area (EEA) and European Research Area (ERA).

The new Act was followed by many other legal acts related to higher education and science, as will be shown below.

Croatian higher education has been having an active part in the EHEA reforms for over two decades. Croatia signed the Bologna Declaration in 2001, thus affirming its obligation to reform the national system of higher education in accordance with the Declaration's requirements. The Act on Scientific Activity and Higher Education of 2003 enabled the reform of the Croatian higher education system and increased the level of university autonomy. All study programmes were restructured in accordance with the principles of Bologna Process introducing 3 main study cycles, transfer of ECTS and diploma supplement.

In comparison to the former legal framework and having study programmes offered at universities, universities of applied sciences and colleges or schools of professional higher education, the Croatian higher education system today supports the education offered at universities (sveučilišta) and universities of applied sciences (veleučilišta). Educational requirements for enrolment in study programmes are determined by higher education institutions, but the legally based admission process to the first cycle programmes has been changed through the years. The new Act requires students to have 4-year secondary school education and the national examination – State Matura passed at the end of the secondary school education, prescribing the same criteria for admission into professional and university study programmes. The NCEEE is the central service for administering the State Matura as part of the process of enrolment into higher education in Croatia.

The process of alignment of the Croatian higher education system with the EHEA has placed emphasis on external and internal quality assurance. In the light of this, the Act on Quality Assurance in Science and Higher Education was introduced in 2009, followed by the new Act on Quality Assurance in Higher Education and Science, adopted at the end of 2022. The new Act ensures the complete autonomy to ASHE in conducting the external quality assurance processes and issuing the licence. According to the legal framework in Croatia, all new study programmes have to be externally evaluated and higher education institutions have to undergo quality assurance reaccreditation in 5-year cycle. The third cycle of reaccreditation of higher education institutions began in 2024.

- **Main governing bodies**

MSEY is the national authority responsible for planning, funding and monitoring of the overall education system. MSEY provides administrative and other activities relating to: the higher education system, securing financial and material conditions for work, all issues related to student welfare, and the legal supervision of higher education institutions.

The National Council for Higher Education, Science and Technical Development is an expert and advisory body of the Croatian Parliament responsible for the strategic development and quality of higher education and science in the Republic of Croatia.

The Rectors' Conference includes all university rectors and decides on issues of common interest for the development of universities.

The Council of Universites of Applied Sciences consists of the deans of all universities of applied sciences. The Council decides on issues of common interest for the development of universities of applied sciences.

ASHE is an independent national body responsible for quality assurance in higher education and science, recognition of qualifications through the ENIC/NARIC, collecting information on Croatian higher education and science, providing support for the implementation of the State Matura and the administration of centralised applications and admissions to higher education.

The Agency for Mobility and EU Programmes is a public institution that promotes and nationally implements decentralised activities of EU programmes and other international programmes in the

fields of education and training, youth, science and sport: Erasmus+, the EU's largest programme for education, training, youth and sport for the period 2021–2027, The European Solidarity Corps (ESC), a programme that gives youth the opportunity to volunteer and work for the common good. The Agency for Mobility and EU Programmes also supports the implementation of EU's Framework Programme for Research and Innovation – Horizon Europe.

- **Legislation in the field of higher education**

Croatian higher education is primarily regulated by the **Act on Higher Education and Scientific Activity** (Official Gazette, No. 119/22). The Act on Higher Education and Scientific Activity regulates the basic principles of performing higher education, scientific and artistic activities. It also regulates the basic issues of conducting the study programmes, the students' rights and obligations, the legal and financial framework of the higher education system, the procedures for the admission of teachers and scientists, their advancement, clear provisions on the internal structure of universities and scientific institutes, the procedure for assembling the programme contract as a new model of financing public higher education institutions and public scientific institutes etc. Also, this legal framework is directly connected with the CROQF by required compliance of all study programmes with the corresponding qualification in the CROQF.

Quality assurance in higher education is regulated by the 2022 **Act on Quality Assurance in Higher Education and Science** (Official Gazette, No. 151/22). This new legal framework enables full autonomy to ASHE in conducting the external quality assurance processes. It also stipulates the establishment of internal quality assurance system by all higher education institutions. For the most part this new legal framework determines the scope of work of the ASHE and quality assurance evaluation procedures.

The CROQF Act (Official Gazette, No. 22/13, 41/16, 64/18, 47/20, 20/21) was introduced in 2013 and since has undergone several amendments. It regulates the system of qualifications at all levels in the Republic of Croatia through qualifications standards based on learning outcomes and following the needs of the labour market, individuals and the society. It has eight levels of learning outcomes and 13 levels of full qualifications, as well as six levels of partial qualifications.

Full and partial qualifications acquired in the Republic of Croatia are joined by the CROQF levels, while meeting the minimum requirements for obtaining full and partial qualifications. For each level of the CROQF, the volume (number of credits) that must be acquired at a certain level of learning outcomes is determined (e.g. level 6.st, 6.sv - Total workload for obtaining a qualification at level 6.st and level 6.sv the minimum is 180 ECTS credits, of which at least 120 ECTS credits are at level 6 or higher level of learning outcomes).

The CROQF is an instrument for regulating the qualifications system in the Republic of Croatia, which ensures clarity, access to acquisition, reliable acquisition, passability and quality of qualifications, as well as the connection of qualification levels in the Republic of Croatia with the qualification levels of the EQF and the QF-EHEA and, indirectly, with the qualification levels of qualifications frameworks in other countries.

The Act on Academic and Professional Title and Academic Degree (Official Gazette, No. 123/23) was passed in 2023. Its main goal is harmonizing national legal framework in the field of higher education with practices in awarding professional and academic titles in the EU, improving mobility all across EHEA and increasing the recognition of Croatian qualifications on the national and European labour market as well as in the higher education systems by harmonizing the titles acquired upon completion of study programmes in Croatia and other EU members, which will ensure better connection and complementarity of the Croatian system of higher education and science in the European area of higher education.

The Act on Recognition and Assessment of Education Qualifications (Official Gazette, No. 69/22) entered into force in June 2022. Major novelties compared to the former Act on Regulated Professions and the Recognition of Foreign Professional Qualifications are an assessment of a foreign education qualification instead of a recognition which implied a legally-binding decision and automatic recognition of the secondary and higher education qualification for the purpose of granting access to further studies in line with *The Council Recommendation on promoting automatic mutual recognition of higher education and upper secondary education and training qualifications and the outcomes of learning periods abroad* (EU, 2018).

The Act on Student Council and Other Student Organizations (Official Gazette, No. 71/07) was passed in July 2007, reforming the system of student representation in Croatia. It allowed stronger student oversight of the functioning of their representatives and introduced an obligatory student ombudsman to all higher education institutions. A new Act is being drafted.

The Ordinance on the Form and Content of Certificate, Diploma and Diploma Supplement (Official Gazette, No. 74/23) regulates the form and content of awarded document upon completion of a study programme.

The Ordinance on Register of Study Programmes (Official Gazette, No. 56/23) and the **Ordinance on Register of Higher Education Institutions** (Official Gazette, No. 56/23) regulate criteria for registration in MSEY registers containing all accredited higher educations and accredited study programmes in Croatia.

- **Types of higher education institutions**

Higher education institutions in the Republic of Croatia are universities (*sveučilišta*) and universities of applied sciences (*veleučilišta*).

Universities are higher education institutions that carry out higher education activities, scientific or artistic activities and professional activities in at least two scientific areas or in scientific and artistic areas and in at least three fields. The university can perform other activities in accordance with the law and statute. Universities deliver university study programmes but may also deliver professional study programmes. Universities may have constituents: legal entities – faculties (fakulteti) or academies (akademije) and non-legal entities such as university department, faculty or art academy, institute, center, clinic or other organizational unit. Universities and their constituents deliver study programmes and conduct scientific research and other professional and artistic activities.

Universities of applied sciences are higher education institutions that deliver professional study programmes. Their mission is to offer application-oriented programmes which are professional in character and which often include practical work experience in the general area of study. Universities of applied sciences can organise and conduct professional study programmes and issue first and second cycle degrees. Universities can issue academic and professional degrees, universities of applied sciences can issue only professional degrees and only universities can implement third cycle education.

A higher education institution is established as a public or private higher education institution. A public higher education institution is established by the Republic of Croatia. A public university is established by law. A public university of applied sciences is established by a decree of the Government of the Republic of Croatia. A public faculty or a public art academy is established by a decision of a university or a state administration body responsible for defense affairs, internal affairs and foreign and European affairs. Founding rights over a public higher education institution are exercised on behalf of the Republic of Croatia by MSEY, in accordance with this Law and the founding act. A private higher education institution is founded by a natural or legal person. A unit of local and regional (regional) self-government cannot establish a higher education institution.

Currently there are 117 higher education institutions as legal entities in Croatia, more precisely: 10 public universities, 4 private universities, 72 faculties and academies, 18 private universities of applied sciences and 13 public universities of applied sciences. The large number of higher education institutions is mostly due to the fact that the four largest universities (Zagreb, Rijeka, Osijek and Split) are not integrated and their constituents (faculties, academies, etc.) are legal entities. Universities in Zadar, Dubrovnik, Pula, Slavonski Brod, Croatian Catholic University in Zagreb, University North are composed of departments, which are not legal entities.

- **Types of higher education programmes and qualifications**

Higher education in the Republic of Croatia is delivered within university and professional study programmes. University study programmes qualify students to work in science and higher education, private and public sectors, and society in general, as well as to develop and apply scientific, artistic and professional knowledge. Professional study programmes provide students with an appropriate level of knowledge and skills required to work in applied professions, as well as direct integration into the working process. University study programmes include undergraduate, graduate and postgraduate programmes. Professional study programmes include undergraduate and graduate studies. According to the Central Bureau of Statistics, in the 2022/2023 academic year, there were 151 827 students enrolled on undergraduate and graduate programmes following regular first and second cycle courses in Croatia.

Organization of university study programmes

University undergraduate study programme – first cycle programme (*sveučilišni prijediplomski studij*) usually lasts for three years in which students accumulate 180 ECTS. A small number of university undergraduate study programmes in Croatia are delivered as four-year programmes in which students accumulate 240 ECTS credits. Upon completion students are awarded a diploma and the academic title of *sveučilišni prvostupnik*/*sveučilišna prvostupnica* (baccalaureus/baccalaurea) with the reference to a specialization (univ. bacc. with an indication of profession). Students holding a first cycle university degree can apply for admission into university or professional graduate study programmes or enter the labour market.

University graduate study programme – second cycle programme (*sveučilišni diplomski studij*) usually lasts for two years in which students accumulate 120 ECTS. A small number of graduate programmes in Croatia are delivered as one-year programmes in which students accumulate 60 ECTS. Upon completion students are awarded a diploma and the academic title of *sveučilišni magistar/magistra* with reference to a specialization (univ. mag. with an indication of profession). Upon completion of university graduate studies for programmes in the field of technical sciences and some programmes in the field of biotechnical sciences, the student acquires the academic title of *sveučilišni magistar/sveučilišna magistra* of engineering with an indication of profession (univ. mag. ing. with an indication of profession). Students holding a second cycle university degree can continue their studies at postgraduate university programmes or enter the labour market.

University integrated undergraduate and graduate study programme – first and second cycle programme (*sveučilišni integrirani prijediplomski i diplomski studij*) lasts for five years in which students accumulate a minimum of 300 ECTS or lasts six years in which students accumulate a minimum of 360 ECTS. Upon completion students are awarded a diploma and the academic title of *sveučilišni magistar/magistra* with an indication of profession (univ. mag. with an indication of profession). Upon completion of integrated first and second cycle study programmes in medicine, dental medicine or veterinary medicine students

are awarded the academic title of *doktor/doktorica* with the reference to their field of study (dr. with an indication of profession). Students can continue their studies at postgraduate university study programmes or enter the labour market.

University specialist study programme – (*sveučilišni specijalistički studij*) lasts for one or two years (60 or 120 ECTS). This study programme is usually dedicated to employed persons who have already completed graduate study programme and want to continue their education in a certain field. Upon completion students are awarded a diploma and the title of *specijalist/specijalistica* in a certain field (spec. with an indication of profession). Students of university specialist study programmes in medicine, veterinary medicine, dental medicine, pharmacy, medical biochemistry, psychology and other fields for which specialist training is prescribed by special law are awarded the title of *sveučilišni specijalist/specijalistica* with reference to their field of study (univ. spec. with an indication of profession).

Doctoral study programme – third cycle programme (*doktorski studij*) lasts for three years. Upon completion students are awarded a diploma and the academic degree of *doktor znanosti/doktorica znanosti* with reference to their scientific field or, in case of art studies, *doktor umjetnosti/doktorica umjetnosti* (dr. sc. with an indication of the scientific field or dr. art.).

Organization of professional study programmes

Professional short-cycle study programme (*stručni kratki studij*) lasts for two years, in which students accumulate minimum of 120 ECTS. Upon completion students are awarded a document called *svjedodžba* and the professional title of *pristupnik/pristupnica* with the reference to a specialization. Students holding a short-cycle professional degree can apply for admission to a programme for the completion of a first cycle professional degree or enter the labour market. Professional short-cycle study programme is the only programme that students without State Matura exam can be enrolled in.

Professional undergraduate study programme – first cycle programme (*stručni prijediplomski studij*) usually lasts for three years in which students accumulate 180 ECTS. A small number of professional undergraduate study programmes in Croatia are delivered as four-year programmes in which students accumulate 240 ECTS. Upon completion students are awarded a diploma and the professional title of *prvostupnik/prvostupnica* (baccalaureus/baccalaurea) with reference to their specialization (bacc. with an indication of profession). Students holding a first cycle professional degree may apply for admission into professional graduate programmes, to a second cycle university programmes under special conditions, or enter the labour market.

Professional graduate programme – second cycle programme (*stručni diplomski studij*) usually lasts for two years in which students accumulate 120 ECTS. A small number of professional graduate study programmes in Croatia are delivered as one-year programmes in which students accumulate 60 ECTS. Upon completion of professional graduate study programmes students are awarded a diploma and the professional title of *magistar/magistra* in a certain field (mag. with an indication of profession). Upon completion of professional graduate programmes in the technical field, the student acquires the title of *magistar/magistra inženjer/ka* (master engineer) with indication of profession (mag. ing. with indication of profession).

University and professional study programmes are linked to the same level descriptors as defined in the CROQF Act.

Table 2.9: Structure and key aspects of university undergraduate study programmes.

Entry requirements:	4-year secondary school, State Matura In the field of arts, under the conditions established by the statute of the higher education institution, a person can enrol in a university undergraduate study without having previously completed an appropriate high school education, if it is an exceptionally gifted person who has been determined by evaluation to successfully complete his studies without previous education. In those cases, the procedure is based on the recognition of non-formal and informal learning. Higher education institutions define precise access requirements.
Education and training:	University undergraduate study programme lasts for three years in which students accumulate a minimum of 180 ECTS or four years in which students accumulate 240 ECTS. Providers of the programmes are accredited universities.
Financing:	Public and private
Teachers qualifications:	PhD in the academic field concerned, with additional requirements in teaching and research
Expected learning outcomes:	In line with CROQF level descriptors described in the CROQF Act.
Assessment and awards:	The university providing education and training also performs assessments. Assessments can be internal, continuous and/or final. Upon completion of a study programme students are awarded the academic title of *sveučilišni prvostupnik/sveučilišna prvostupnica* (baccalaureus/baccalaurea) with reference to their field of study (univ. bacc. with an indication of profession). The awarded document is a diploma.
Progression routes:	Students holding this degree can access university graduate study programmes (*sveučilišni diplomski studij*) or professional graduate study programmes (*stručni diplomski studij*).
Labour market:	Students holding this qualification enter the labour market meeting the requirements for managing professional projects in unpredictable conditions.
Quality assurance:	Universities are accredited/reaccredited by the ASHE. Study programmes are validated and accredited by the ASHE. Access, education, assessment and awards are ensured by both internal and external quality assurance systems.
CROQF level	6.sv
EQF level	6
QF-EHEA level	1

Table 2.10: Structure and key aspects of university graduate study programmes.

Entry requirements:	Completion of university undergraduate study or integrated undergraduate and graduate study programme. Exceptionally, a person who has completed the appropriate professional undergraduate study programme can also enrol in a university graduate study programme in accordance with the general act of the higher education institution and having the distinctive exams determined by the higher education institution taken. Higher education institutions define precise access requirements.
Education and training:	The university graduate study programme that a student enrols in after a three-year university or professional undergraduate study programme lasts for two years and upon its completion at least 120 ECTS credits are acquired. A university graduate study programme that a student enrols in after a four-year university or professional undergraduate study programme lasts one year and upon its completion at least 60 ECTS credits are acquired or lasts two years and upon its completion at least 120 ECTS credits are acquired. Providers of the study programmes are accredited universities.
Financing:	Public and private
Teachers qualifications:	PhD in the academic field concerned, with additional requirements in teaching and research.
Expected learning outcomes:	In line with CROQF level descriptors described in the CROQF Act
Assessment and awards:	The same universities providing education and training also perform assessments. Assessments are internal, continuous and/or final. Upon completion students are awarded the academic title of *sveučilišni magistar/ sveučilišna magistra* with reference to a specialization (univ. mag. with an indication of profession). Upon completion of university graduate study programmes in the field of technical sciences and some programs in the field of biotechnical sciences, the student acquires the academic title of university *magistar/magistra* of engineering with an indication of profession (univ. mag. ing. with an indication of profession). The awarded document is a diploma.
Progression routes:	Students holding this degree can access university specialist or doctoral study programmes or enter the labour market.
Labour market:	Students holding this qualification enter the labour market meeting requirements to manage professional projects in complex and unpredictable conditions.
Quality assurance:	Universities are accredited/reaccredited by the ASHE. Study programmes are also validated and accredited by ASHE. Access, education, assessment and awards are ensured by both internal and external quality assurance systems.
CROQF level	7.1.sv
EQF level	7
QF-EHEA level	2

Table 2.11: Structure and key aspects of university integrated undergraduate and graduate study programmes.

Entry requirements:	4-year secondary school, State Matura University integrated undergraduate and graduate study in the field of art can be enrolled by a person without having previously completed an appropriate high school education, if it is an exceptionally gifted person who has been determined by evaluation to successfully complete the study without previous education. The enrolment process is based on the recognition of non-formal and informal learning. Higher education institutions define precise access requirements.
Education and training:	University integrated undergraduate and graduate study programme lasts for five years and upon its completion at least 300 ECTS credits are acquired or lasts for six years and upon its completion at least 360 ECTS credits are acquired.
Financing:	Public and private
Teachers qualifications:	PhD in the academic field concerned, with additional requirements in teaching and research
Expected learning outcomes:	In line with CROQF level descriptors described in the CROQF Act.
Assessment and awards:	The same universities providing education and training also perform assessments. Assessments are internal, continuous and/or final. Upon completion of a study programme students are awarded the academic title of university *magistar/magistra* with reference to a specialization (univ. mag. with an indication of profession). Upon completion of integrated first and second cycle study programmes in medicine, dental medicine or veterinary medicine students are awarded the academic title of *doktor/doktorica* with reference to their field of study (dr. with an indication of profession). The awarded document is a diploma.
Progression routes:	Students can continue their studies at university specialist or doctoral study programmes or enter the labour market.
Labour market:	Students holding this qualification enter the labour market meeting requirements to manage professional projects in complex and unpredictable conditions.
Quality assurance:	Universities are accredited/reaccredited by the ASHE. Study programmes are validated and accredited by the ASHE. Access, education, assessment and awards are ensured by both internal and external quality assurance systems.
CROQF level	7.1.sv
EQF level	7
QF-EHEA level	2

Table 2.12: Structure and key aspects of university specialist study programme.

Entry requirements:	A university specialist study can be enrolled by a person who has completed a corresponding university graduate study or a university integrated undergraduate and graduate study. Exceptionally, the university specialist study can also be enrolled by a person who has completed a professional graduate study with the passing of distinction exams determined by the higher education institution and with at least five years of work experience in the field of study.
Education and training:	University specialist study programme lasts at least one year, at most two years, and upon its completion a minimum of 60 ECTS credits and a maximum of 120 ECTS credits are acquired.
Financing:	Public and private
Teachers qualifications:	PhD in the academic field concerned, with additional requirements in teaching and research
Expected learning outcomes:	In line with CROQF level descriptors described in the CROQF Act
Assessment and awards:	The universities providing education and training also perform assessments. Assessments are internal, continuous and/or final. Upon completion students are awarded an academic title of *specijalist/specijalistica* in a certain field (spec. with an indication of profession). Students of graduate specialist programmes in medicine, veterinary medicine, dental medicine, pharmacy, medical biochemistry, psychology and other fields for which specialist training is prescribed by special law are awarded the title of university *specijalist/specijalistica* with reference to their field of study (univ. spec. with an indication of profession). The awarded document is a diploma.
Progression routes:	Students holding this degree can access postgraduate doctoral programmes.
Labour market:	Students holding this qualification enter the labour market meeting requirements to manage professional projects in complex and unpredictable conditions.
Quality assurance:	Universities are accredited/reaccredited by the ASHE. Study programmes are validated and accredited by the ASHE. Access, education, assessment and awards are ensured by both internal and external quality assurance systems.
CROQF level	7.2
EQF level	7
QF-EHEA level	2

Table 2.13: Structure and key aspects of doctoral study programme.

Entry requirements:	Doctoral study programme can be enrolled by a person who has completed a corresponding university graduate study programme or a university integrated undergraduate and graduate study programme or a university specialist study programme. The conditions of admission to doctoral studies are determined by the decision of the higher education institution.
Education, training and research	Doctoral study lasts for three years and upon its completion 180 ECTS credits are acquired. Providers of the study programmes are accredited universities.
Financing:	Public and private
Teachers qualifications:	PhD in the academic field concerned, with additional requirements in teaching and research
Expected learning outcomes:	In line with CROQF level descriptors described in the CROQF Act.
Assessment and awards:	Universities perform assessments. Assessments within courses are internal, continuous and/or final. The final assessment is an internal or external public defence of a PhD thesis. Upon completion of a study programme students are awarded the academic title of *doktor znanosti/doktorica znanosti* with reference to their scientific field or, in case of art studies, *doktor umjetnosti/doktorica umjetnosti* (dr. sc. with an indication of the scientific field or dr. art.). The awarded document is a diploma.
Progression routes:	N/A
Labour market:	Researchers holding this qualification enter the labour market meeting requirements to manage research projects in complex and unpredictable conditions.
Quality assurance:	Universities are accredited/reaccredited by the ASHE. Study programmes are validated and accredited by the ASHE. Access, education, assessment and awards are ensured by both internal and external quality assurance systems.
CROQF level	8.2
EQF level	8
QF-EHEA level	3

Table 2.14: Structure and key aspects of professional short-cycle study programme.

Entry requirements:	Secondary school. Higher education institutions define precise entry requirements.
Education and training:	Professional short-cycle study programme lasts for two years in which students accumulate a minimum of 120 ECTS credits. Providers of the programmes are accredited higher education institutions, including universities.
Financing:	Public and private
Teachers qualifications:	Higher education second cycle qualification in the academic field concerned, with additional requirements in teaching.
Expected learning outcomes:	In line with CROQF level descriptors described in the CROQF Act.
Assessment and awards:	The higher education institutions providing education and training also perform assessments. Assessments can be internal, continuous and/or final. Upon completion students are awarded the professional title of *pristupnik/ pristupnica* with the reference to a specialization. The awarded document is called *svjedodžba* (certificate).
Progression routes:	Students holding this degree can access professional undergraduate study programmes.
Labour market:	Students holding this qualification enter the labour market meeting requirements for taking part in the management of activities in partially unpredictable conditions.
Quality assurance:	Universities are accredited/reaccredited by the ASHE. Study programmes are validated and accredited by the ASHE. Access, education, assessment and awards are ensured by both internal and external quality assurance systems.
CROQF level	5
EQF level	5
QF-EHEA level	1

Table 2.15: Structure and key aspects of professional undergraduate study programme.

Entry requirements:	4-year secondary school, State Matura or short-cycle professional study programme In the field of arts, under the conditions established by the statute of the higher education institution, a person can enrol in a professional undergraduate study without having previously completed an appropriate high school education, if it is an exceptionally gifted person who has been determined by evaluation to successfully complete his studies without previous education. The procedure for enrolling this person is based on the recognition of non-formal and informal learning. Higher education institutions define precise access requirements.
Education and training:	Professional undergraduate study programme lasts for three years in which students accumulate a minimum of 180 ECTS or four years in which students accumulate 240 ECTS. Providers of the professional study programmes are accredited higher education institutions, including universities.
Financing:	Public and private
Teachers qualifications:	Higher education second cycle qualification in the academic field concerned (PhD required for professor teaching position), with additional requirements in teaching and research
Expected learning outcomes:	In line with CROQF level descriptors described in the CROQF Act.
Assessment and awards:	The higher education institutions providing education and training also perform assessments. Assessments can be internal, continuous and/or final. Upon completion students are awarded a diploma and the professional title of *prvostupnik/prvostupnica* (baccalaureus/baccalaurea) with reference to their specialization (bacc. with an indication of profession). The awarded document is a diploma.
Progression routes:	Students holding this degree can access professional graduate studies and university graduate studies under specific requirements.
Labour market:	Students holding this qualification enter the labour market meeting market requirements to manage professional projects in unpredictable conditions.
CROQF level	6.st
EQF level	6
QF-EHEA level	1
Quality assurance:	Universities are accredited/reaccredited by the ASHE. Study programmes are validated and accredited by the ASHE. Access, education, assessment and awards are ensured by both internal and external quality assurance systems.

Table 2.16: Structure and key aspects of professional graduate study programme.

Entry requirements:	Professional undergraduate or university undergraduate study programme Higher education institutions define precise entry requirements.
Education and training:	The university graduate study programme that a student enrols in after a three-year university or professional undergraduate study programme lasts two years and upon its completion at least 120 ECTS points are acquired. A university graduate study programme that a student enrols in after a four-year university or professional undergraduate study programme lasts one year and upon its completion at least 60 ECTS credits are acquired or lasts two years and upon its completion at least 120 ECTS credits are acquired. Providers of the programmes are accredited universities.
Financing:	Public and private
Teachers qualifications:	Higher education second cycle qualification in the academic field concerned (PhD required for professor teaching position), with additional requirements in teaching and research
Expected learning outcomes:	In line with CROQF level descriptors described in the CROQF Act.
Assessment and awards:	The higher education institutions providing education and training also perform assessments. Assessments can be internal, continuous and/or final. Upon completion of professional graduate programmes students are awarded a diploma and the professional title of *magistar/magistra* in a certain field (mag. with an indication of profession). Upon completion of professional graduate programmes in the technical field, the student acquires the title of *magistar/magistra inženjer/inženjerka* (master engineer) with indication of profession (mag. ing. with indication of profession).
Progression routes:	The university specialist study can be enrolled by a person who has completed a professional graduate study with the passing of distinction exams determined by the higher education institution and with at least five years of work experience in the field of study.
Labour market:	Students holding this qualification enter the labour market meeting requirements to manage professional projects in complex and unpredictable conditions.
Quality assurance:	Universities are accredited/reaccredited by the ASHE. Study programmes are validated and accredited by the ASHE. Access, education, assessment and awards are ensured by both internal and external quality assurance systems.
CROQF level	7.1.st
EQF level	7
QF-EHEA level	2

- **Certificate, diploma and diploma supplement**

The form and the content of awarded document upon completion of a study programme is regulated by the Ordinance on the form and content of certificate, diploma and diploma supplement of study programmes, passed in 2023.

A student who has completed higher education study programme in the Republic of Croatia, along with the certificate or diploma, is issued with diploma supplement in the Croatian and English language, both in printed or digital form.

The printed diploma supplement is delivered along with the printed diploma or certificate and a digital one along with the diploma or certificate issued in a digital form.

The Ordinance prescribes the content of diploma supplement regarding personal data of the student, details on the study programme and the acquired qualification, as well as information regarding CROQF and EQF (conditions for access and the level of the CROQF required for access, level of acquired qualification – type of study programme, level of study, university/professional, level of the CROQF, level of EQF) and information on higher education system in Croatia.

The learning outcomes achieved during a period of study are graded by using the following grades:

Excellent (5): outstanding achievement corresponding to the letter grade "A"

Very good (4) – above-average achievement corresponding to the letter grade "B"

Good (3) – average achievement corresponding to the letter grade "C"

Sufficient (2) – satisfactory achievement corresponding to the letter grade "D"

Insufficient (1) – learning outcomes have not been achieved and the grade corresponds to the letter grade "F".

Specific courses may be graded in a descriptive manner but without being calculated into the average of the grades attained during a period of study.

REPUBLIC OF CROATIA

_____

_____

(full name and seat of the higher education institution or higher education institutions at which the diploma or certificate was obtained)

DIPLOMA SUPPLEMENT

_____

(coat of arms or logo of the institution(s))

_____

(First name and last name)

_____

(date, place and country of birth)

_____ _____ _____

(Personal Identification Number) (Academic citizen identification number) (Student identification number)

INFORMATION ON THE QUALIFICATION

Academic or professional title(s) conferred, or academic degree	
Scientific area and scientific field	
Name of study programme	
Information on study programme accreditation	
Name and address of awarding institution(s)	
Information on accreditation of the institution	
Name and address of institution administering studies if different from awarding institution	

Language(s) of instruction	
Access requirements and level of the CROQF required for access	
Level of qualification obtained (type of study programme, level of study, university/professional)	
Level of the CROQF	
EQF level	
Official duration of study programme in years or semesters	
Total number of ECTS credits gained	
Data on the delivery of study and status of the student during his/her studies (full-time, part-time, recognition of prior learning and similar)	

List of passed courses

Course title	Grade	ECTS credits	Learning outcomes (please see under Additional information)

Grading system/grade distribution guidance			
Average grade		Weighted grade average during studies and level of success	
Data on the manner of completing the study programme and obtaining diploma			
Data on the final or master thesis, final or master exam, performance of work of art or defence of scientific or art doctoral dissertation			

ADDITIONAL INFORMATION

(name and surname of the head of higher education institution)

(place and date of issuing the diploma supplement)

LS

(signature of the head of higher education institution)

Figure 2.2: Diploma Supplement Template

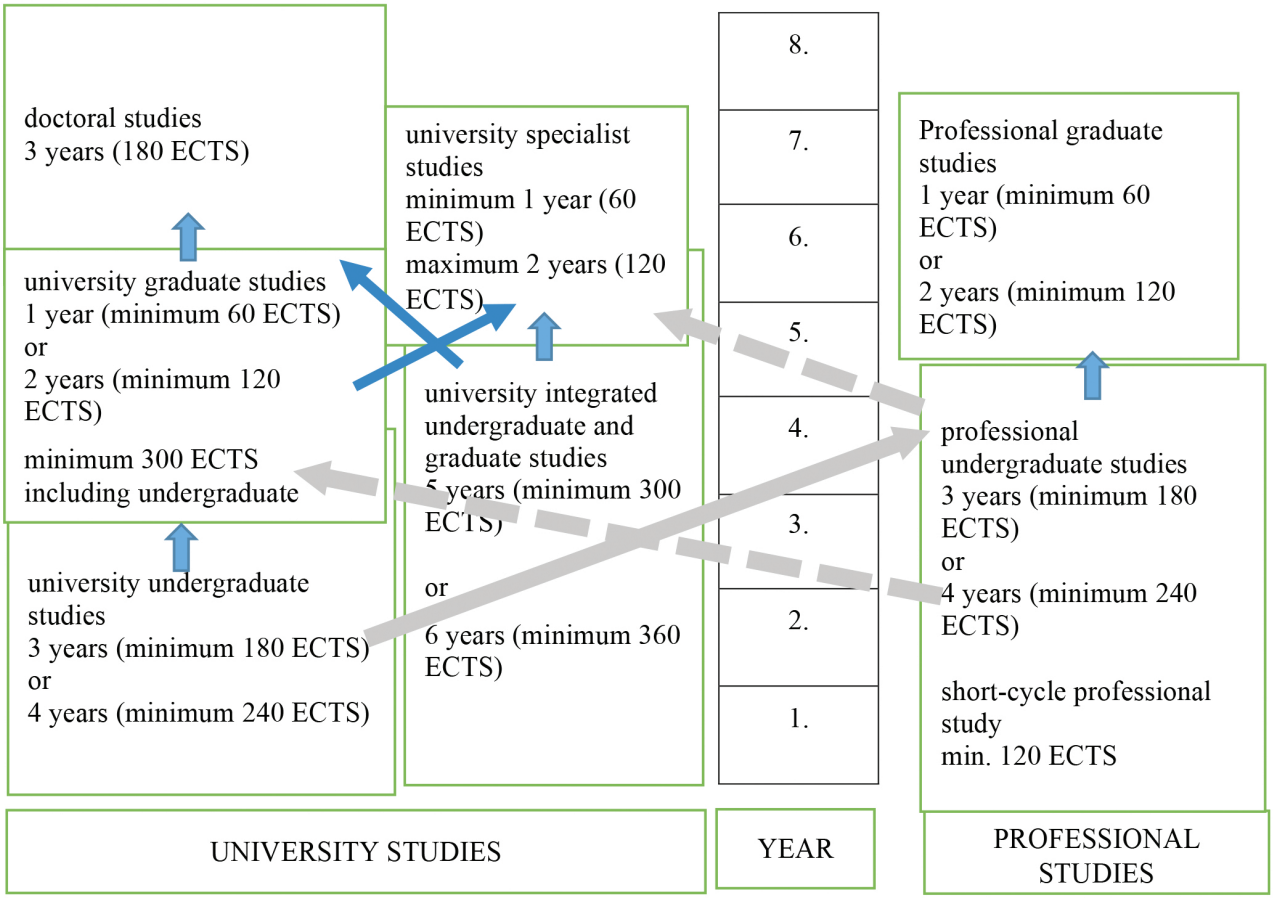


Figure 2.3: Overview of the structure and vertical and horizontal mobility of university and professional studies.

- **Quality Assurance in Croatian Higher Education**

Quality assurance in higher education is regulated by the 2022 Act on Quality Assurance in Higher Education and Science.

Internal quality assurance is provided by the institutions' internal quality assurance systems in the form of self-evaluation procedures.

External quality assurance is provided by ASHE. ASHE is an independent public body responsible for external quality assurance in Croatia and it implements accreditation of all new study programmes, accreditation and re-accreditation of all higher education institutions, off-plan evaluations and thematic evaluations. In the process of external quality evaluation, the Quality Standards are applied, which are based on and harmonized with the Standards and Guidelines for Quality Assurance in the EHEA (ESG) and legal legislation.

Since 2011, ASHE has been a member of ENQA and went through three accreditations carried out by ENQA and from the same year it has been a member of EQAR. The ASHE is also a member of the International Network for Quality Assurance Agencies in Higher Education (INQAAHE), the Central and Eastern European Network of Quality Assurance Agencies in Higher Education (CEENQA), an international association of institutions interested in the topic of academic ranking and excellence in higher education and science – IREG Observatory. The ASHE is a member of the International Quality Group of the American Council for Higher Education Accreditation (CHEA), the European Consortium for Accreditation (ECA) and has an observer status in the Asia Pacific Quality Network (APQN). The ASHE is a long standing member of the European Network of National Information Centres on Academic Recognition and Mobility (ENIC) and the National Academic Recognition Information Centre (NARIC).

The ASHE is also a member of the International Association of Admissions Organisations (IAAO), European Association of Communication Professionals in Higher Education (EUPRIO) and international association *GUIDE Association – Global Universities in Distance Education*.

New Act on Quality Assurance introduces a new quality assurance system, based on modern criteria, especially with regard to graduate and postgraduate studies, with the aim of encouraging the establishment and development of study programmes in areas relevant to the economy and society development.

At the same time, the framework of the quality assurance system is harmonized with the legal solutions that are equally applicable to public and private higher education institutions. The framework for the adoption of an evaluation system ensures the application of equal qualitative standards regardless of the type of study programmes. The procedure for obtaining a licence to conduct study programmes, as well as the criteria for their evaluation, are standardized for all types of higher education institutions and also include the compliance of the study programme with the qualification standard enrolled in the CROQF Register, if the qualification standard is entered. Introduction criteria for compliance of the study programme with the qualification standard entered in the CROQF Register through the regular procedure of drawing up and approving studies programmes based on assessments of current and future needs of the labour market, society and individuals, is a strategic obligation of MSEY. Guidelines for harmonizing study programmes with qualification standards are currently being drafted, which will hopefully encourage higher education institutions to harmonise study programmes with qualification standards. At the same time, various activities are undertaken in order to encourage higher education institutions to create as many qualification standards as possible. As opposed to the 2009 Act, when university study programmes delivered at public universities were self-accredited by university senates and programmes delivered by private higher education institutions and universities of applied sciences had to be accredited by the ASHE, the new Act prescribes all new study programmes to be accredited by ASHE. Also, the new Act ensures ASHE's complete authonomy in issuing a licence to higher education institution and study programmes which was in the competence of the minister of science and education by the former law.

In accordance with the new legal regulation, a higher education institutions as well as scientific institutes are obliged to set up an organizational unit for quality assurance and quality improvement. The system of internal quality assurance and improvement at the university includes:

monitoring the implementation of the development strategy, implementation of internal quality assurance and improvement procedures, monitoring and improving the quality of the study programmes, monitoring and improvement of learning, teaching and evaluation methods of the study programmes, monitoring and improving the achievement of student learning outcomes, monitoring and improving the scientific and artistic productivity of teachers, monitoring and improving the professional work of teachers, monitoring and improving the work of employees of professional services, monitoring and improvement of other activities carried out by the higher education institution.

The system of internal quality assurance and improvement at the scientific institute includes: monitoring the implementation of the development strategy, implementation of internal quality assurance and improvement procedures, monitoring and improving the scientific productivity of scientists, monitoring and improving the professional work of scientists, monitoring and improving the work of all other employees, monitoring and improvement of other activities performed by the scientific institute.

The new legal framework assigns a clear authority to ASHE for the implementation of evaluation procedures of higher education and scientific institutions and study programmes abroad when requested by foreign institutions. Accreditation of a joint study programme is carried out by directly

applying the procedure and standards prescribed by the European approach to ensure the quality of joint studies, when conducted by ASHE. Higher education institutions participating in the performance of the joint study can select the agency, other than ASHE, registered in EQAR that will carry out the initial accreditation procedure. In that case, if the decision of another agency is positive, the ASHE issues a decision on recognition of the decision of another agency and a decision on a permit to conduct a joint study programme. The permit is issued for a period of five years. The joint study is registered in the Register of Study Programmes maintained by MSEY.

At the same time, new scope of work of the ASHE is related to the evaluation of the implementation of programme contracts – a new way of financing public higher education institutions, which links quality assurance procedures with policies in higher education and science.

2.2 European Background

2.2.1 European Qualifications Framework

The development of the EQF commenced in 2004 in response to requests from Member States, social partners and other stakeholders for a common reference tool to increase the transparency of qualifications. An initial blueprint, proposing eight-level qualifications framework based on learning outcomes, was published by the European Commission and consulted upon in the latter half of 2005. The consultation demonstrated that there was widespread support for the initiative, and a revised text was adopted by the Commission as a proposal in September 2006. The proposal recommended the establishment of an overarching qualifications framework, which would serve as a translation device to make qualifications more comprehensible across different countries and systems in Europe.

The formal adoption by the **European Parliament and Council of Recommendation establishing the EQF was completed on 23 April 2008**. The tasks for the 32 countries that cooperated in the European educational policy included relating national qualifications levels to the EQF by 2010, in particular by referencing, in a transparent manner qualifications levels to the EQF levels set out in the Recommendation and adopting measures, as appropriate, so that by 2012 all new qualification certificates, diplomas and 'Europass' documents issued by competent authorities contain a clear reference, by way of national qualifications systems, to the appropriate EQF level. The EQF Recommendation invited countries participating in the "Education and Training 2020" to refer their national qualifications levels to the EQF.

On 22 May 2017, the Council Recommendation on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning was adopted. According to the Recommendation, national qualifications frameworks and systems change over time, therefore referencing to the EQF should be reviewed and updated, whenever relevant, in line with the levels of the EQF set out in Annex II and using the criteria set out in Annex III, with due regard to the national context. Furthermore, within six months from having referenced or updated the referencing report, Member States and other participating countries need to publish the referencing report and provide relevant information for comparison purposes on the relevant European portal.

The core of the EQF consists of eight qualification levels, described through learning outcomes (knowledge, skills and competencies). The principal aims of the EQF are to make possible the comparison of qualification levels within national qualification systems in Europe and thus, to promote citizens' mobility between countries and to facilitate their lifelong learning. Particularly, in

the capacity of the EQF to capture all kinds and levels of qualifications, regardless of where and how learning has taken place, the EQF is able to support lifelong learning.

2.2.2 Qualifications Framework of the European Higher Education Area

Restructuring of higher education programmes and consequently, qualifications, is the core of the Bologna Process. The ministers for higher education that gathered at the Bologna Conference in Berlin in 2003 called for the elaboration of an overarching framework for qualifications of the EHEA. Secondly, they called for the development of national frameworks of qualifications. Subsequently, the QF-EHEA was adopted by European Ministers for higher education in Bergen in May 2005. In the Leuven/Louvain-la-Neuve Communiqué (2009), the Ministers stated that they "aimed at having national qualifications frameworks implemented and prepared for self-certification against the overarching QF-EHEA by 2012".

The QF-EHEA provides a mechanism for relating national qualifications frameworks for higher education qualifications so as to enable international transparency, international recognition of qualifications and international mobility of students and graduates. The three Bologna cycles, established through the Bologna Process, can be best understood by reference to internationally acceptable descriptors which have been developed jointly by stakeholders across Europe – the so-called Dublin Descriptors. These were developed by a group of European higher education specialists, and cover three cycles, in addition to a short-cycle qualification. The short-cycle qualifications were recognised as a stand-alone qualification within the QF-EHEA through the Paris Communiqué (adopted on 25 May 2018).

Qualification descriptors are designed to be read as general statements of the typical achievement of learners who have been awarded a qualification upon successful completion of a cycle.

The success and acceptance of the referencing as well as of the self-certification process depends on trust and confidence amongst all stakeholders. The self-certification process needs to equally satisfy a series of criteria and procedures, including the designation of competent bodies responsible for the maintenance of the national qualifications framework by the national ministry responsible for higher education, a clear and demonstrable link between the qualifications in the national qualifications framework and the cycle qualification descriptors of the QF-EHEA, the existence of national quality assurance systems for higher education consistent with the Berlin Communiqué and subsequent communiqués agreed upon by Ministers through the Bologna Process.

Furthermore, the national framework and any alignment with the QF-EHEA, is to be referenced in all Diploma Supplements. The self-certification reports must be made public so that partners in the Bologna Process are able to see the reasons that led competent national authorities to conclude the compatibility of their framework with the Bologna framework.

2.2.3 Rationale and Purpose of the Referencing of the CROQF to the EQF and the QF-EHEA

Both the EQF and the QF-EHEA are overarching frameworks designed to improve transparency of qualifications and support lifelong learning, transnational and international mobility. As asserted by the Recommendation establishing the EQF, the QF-EHEA and the EQF are compatible so that the learning outcomes of certain EQF levels (levels 5 to 8) correspond to the cycle descriptors of the QF-EHEA.

Table 2.17: Corresponding EQF levels and QF-EHEA cycles.

EQF levels	QF-EHEA Cycles
8	Third cycle
7	Second cycle
6	First cycle
5	Short cycle
4	
3	
2	
1	

The two meta-frameworks, the EQF and the QF-EHEA, have been developed through two different processes and with some differences in objectives, but they exist alongside each other and are compatible with one another. While the Bologna process intends to reform and build bridges between higher education systems in Bologna countries, the EQF enables referencing of national qualifications systems and facilitation of mutual understanding of all qualifications by the countries involved.

Having related its national qualifications framework to the EQF and the QF-EHEA, the Republic of Croatia has confirmed its involvement in the core of European integration processes. Since the beginning of development of the EQF, Croatia has participated in the initiative of development and implementation of the EQF, side by side with other Member States. In 2006 and 2007, Croatia actively participated in the EQF Implementation Preparatory Group established by the European Commission, and since 2008 has participated in the EQF Advisory Group. Together with 46 other countries in Europe, Croatia has also participated in the higher education initiative within the National Correspondents. The initial report, as an outcome of the referencing process, was concerned with the referencing of the CROQF to the EQF and the QF-EHEA. Through the referencing process involving Croatian national authorities responsible for qualifications and stakeholders responsible for the development and use of qualifications, the correspondence between the CROQF, EQF and QF-EHEA has been defined.

The main purpose of the referencing and self-certification process and the benefits for those having qualifications acquired in educational institutions in Croatia is threefold.

Firstly, the referencing and self-certification process significantly contributes to the quality assurance of the Croatian educational system by allowing its referencing and thus, comparison to other educational systems in Europe.

Secondly, by having referenced its qualifications framework, Croatia facilitates its citizens and others that have been awarded Croatian qualifications both learning and working mobility throughout the wide European education area and European labour market. That means that students and graduates with Croatian qualifications may study and work abroad and have their qualifications fully recognised at the European level. Moreover, a part of the purpose of the referencing process is to enable the recognition of qualifications from other European countries in Croatia.

Finally, this allows for Croatian citizens to be more competitive on the wide European labour market by enabling European employers to easily recognise Croatian qualifications.

The initial Referencing and self-certification report of the CROQF to the EQF and the QF-EHEA was presented at the fourteenth meeting of the Advisory Group of the EQF, on 13-14 March 2012 in Brussels.

Development of the CROQF and main concepts of the CROQF

3. Development of the CROQF and main concepts of the CROQF

3.1 The CROQF

3.1.1 Development of the CROQF from the last report

The CROQF is an instrument of reform at national level aimed at improving the Croatian education system in terms of quality assurance, transparency and relevance in relation to the labour market. In international context, it is aimed at improving the transparency, comparability and portability of Croatian qualifications by referencing them to the EQF.

Currently the CROQF is in an advanced stage of its development, with most of its mechanisms developed, numerous stakeholders informed and involved in the process. Consequently, requests for inclusion of occupational and qualifications standards as well as inclusion of units of competencies and learning outcomes in the CROQF Register are being submitted on a daily basis. Educational/study programmes compliant with the CROQF are developed and carried out by educational institutions. However, there are still some challenges and aims which need to be met before the benefits of the CROQF can be fully utilised.

The fundamental part of the **legal framework regulating the CROQF** has been established (including the CROQF Act and the Ordinance on the CROQF Register), providing the basis for development of specific tools and procedures and establishment of specific bodies. Most bodies foreseen within the legal framework have been appointed and are active.

Methodologies and guidelines for development and evaluation of occupational standards (indicating competences required at the labour market) and qualifications standards (indicating the minimum of necessary units of learning outcomes, aligned with competences in occupational standards) have been developed. Initially, single Guidelines for development of qualifications standards were introduced, which later split into the Guidelines for development of qualifications standards in vocational education and training and the Guidelines for development of qualifications standards in higher education.

The Law on the CROQF introduced changes **related to the evaluation and adoption of occupational and qualification standards** and **the role of sector councils**.

Initially, the NCDHP was appointed as the central strategic body for the CROQF and the 25 sectoral councils as professional bodies whose primary task was evaluation of proposals of occupational and qualifications standards. A procedure for entry into the CROQF Register starts at the request of any legal entity or a natural person, as well as at the request of national authorities providing that their interest has reasonable grounds. MSEY was responsible for appointment and administration of sectoral councils.

Amendments to the CROQF Act were adopted in 2018 and 2021. With the **2021 amendments**, changes were introduced in terms of assigning higher education qualifications to CROQF levels, taking into account the differences between and value of both **academic and professional studies**. Level 6.st covers professional bachelor's diplomas, while 6.sv includes university bachelor's diplomas. Similarly, levels 7.1.st and 7.1.sv respectively include professional and academic master's diplomas. The fundamental difference between professional and university studies stems from the different learning outcomes that are acquired in different types of studies. The descriptions of learning outcomes defined by the CROQF focus on the complexity and content of learning outcomes, and not on the type of study or the institutional context in which these outcomes are acquired. Qualifications acquired at university and professional studies differ in the share of knowledge and skills in learning outcomes. The diversity of university and **professional** studies is recognized by the use of the CROQF in the content and complexity

of learning outcomes and their purpose. Graduates of university studies are directed to work in science, art and higher education, the public sector, etc., and they open the possibility of enrolling in doctoral studies, but they also train them to perform professional occupations. On the other hand, graduates of professional studies are directed primarily to the performance of professional occupations and direct involvement in the work process.

Additional changes were also introduced with the 2021 amendments to support better efficiency in the procedures of the inclusion of occupational and qualifications standards in the CROQF Register and their evaluation, including **responsibilities of relevant institutions** in this process.

According to the new procedures, **requests for inclusion of qualification standards in the CROQF Register** are sent to agencies in the education system (ASHE and AVETAE), while requests for inclusion of occupational standards in the CROQF Register are still sent to MLPSFSP. The agencies in the education system make decisions on the entry of qualification standards in the CROQF Register, and MLPSFSP makes decisions on the entry of occupational standards in the CROQF, based on the opinion of the evaluation committees established by the agencies in the education system, that is, MLPSFSP. Sectoral councils have a more strategically oriented role and are no longer in charge of expert evaluation of proposals for occupational standards and qualification standards, and administrative and professional support is no longer provided by MSEY, but by agencies in the education system. MSEY is still responsible for maintenance and development of the Information System of the CROQF Register. Continuity was ensured since all procedures started according to the previously valid law continued in accordance with the amended Law.

3.1.2 The CROQF and policy developments

The CROQF is highlighted as a strategically important tool in key national strategies.

According to the **National plan for the development of the education system (2023 – 2027)**, in terms of quality and relevance, the development and implementation of the CROQF in higher education is expected to continue as a key tool for the development and improvement of study programmes and their link to the needs of the labour market. Furthermore, the strategic guidelines of the comprehensive system of ensuring the quality of vocational education and training will take care of ensuring the quality of the development of vocational qualifications (with the use of CROQF instruments). Finally, due to the still insufficient alignment of educational supply and demand, there is a big gap in the quality of adult education programmes offered and in the availability of education programmes in certain sectors, therefore as a crucial measure to overcome this gap the development of modern adult education programmes in line with the CROQF is foreseen.

The CROQF is recognized as an important tool in enhancing the quality and relevance of education in the **National Recovery and Resilience Plan (2021-2026)**. According to the Recovery and Resilience Plan, low participation rate in adult education programmes presents a big challenge, which is why it is necessary to continue improving their quality and relevance, and to continuously harmonize education programmes with qualification standards from the CROQF Register. Furthermore, as stated in the Recovery and Resilience Plan, in vocational education, new modular, outcome-oriented curricula will be adopted, prioritized for the labour market, based on qualification standards and occupational standards.

Finally, improving the quality of higher education is part of the comprehensive transformation of higher education, which includes determining qualification standards.

According to the Decision on the adoption of the **National plan for work, protection at work and employment for the period from 2021 to 2027**, standardization of occupation is an important element of harmonizing supply and demand on the labour market, that is, aligning education with

the needs of the labour market. The fundamental principle of linking education with the needs of the labour market lies in the definition of key jobs and competences that are essential determinants of a certain occupation and make up the occupational standard itself. Learning outcomes and educational programmes that will enable the acquisition of knowledge and skills needed in the labour market are developed and defined from a clearly defined occupational standard, that is, units of competences.

3.1.3 The basic legislation and guidelines on the CROQF

The Act on the CROQF (Official Gazette, No. 22/13, 41/16, 64/18, 47/20, 20/21)

https://www.zakon.hr/z/566/Zakon-o-Hrvatskom-kvalifikacijskom-okviru

The law comprehensively regulates relevant issues related to the CROQF and the regulation of the system of qualifications at all educational levels. Furthermore, the Law introduced additional changes that were necessary for the effective further development and implementation of the CROQF. Above all, the above includes changes related to the assignment of competences to existing agencies in the education system, procedures for evaluating and adopting occupational standards and qualification standards and to the role of sector councils. This aims to improve efficiency, simplify and speed up the procedures for registering occupational standards and qualification standards in the CROQF Register and to improve their applicability and quality. In doing so, the direct participation of stakeholders in the CROQF processes is strengthened and the existing resources in the education system are included more.

The Ordinance on the CROQF Register (Official Gazette, No. 96/21):

https://narodne-novine.nn.hr/clanci/sluzbeni/2021_09_96_1741.html

The Ordinance on the CROQF Register (OG, No. 96/21) (hereinafter: Ordinance) was drafted on the basis of the Act on Amendments to the Act on the CROQF (OG, No. 20/21). Pursuant to Article 51, upon entry into force of the Ordinance, the Ordinance on the CROQF Register ceases to be valid (OG, number 62/14). The Ordinance regulates the content of the CROQF Register, registration procedures in the CROQF Register, internal and external quality assurance system, content and form of application submission forms, content of sub-registers.

There are relevant guidelines for the use of the CROQF produced in 2021 and 2022:

Methodology for development of occupation standards and units of competences

Metodologija za izradu standarda zanimanja i skupova kompetencija

Purpose of the document is to explain how to develop occupational standards. Target group(s) are potential applicants of occupational standards.

Guidelines for development of qualifications standards in higher education

Smjernice za razvoj standarda kvalifikacija u visokom obrazovanju

Purpose of the document is to explain how to develop qualification standards in higher education. Target groups are potential applicants of qualification standards in higher education.

Guidelines for development of qualifications standards in vocational education and training

Smjernice za razvoj standarda kvalifikacija u strukovnom obrazovanju i osposobljavanju

Purpose of the document is to explain how to develop qualification standards in vocational education and training. Target groups are potential applicants of qualification standards in vocational education and training.

Instructions for the development, coordination and approval of educational programmes of higher education level for the needs of financing through vouchers with funds from the National Recovery and Resilience plan 2021 - 2026

Uputa za izradu, usklađivanje i odobravanje obrazovnih programa visokih učilišta na razini visokog obrazovanja za potrebe financiranja putem vaučera sredstvima iz Nacionalnog plana oporavka i otpornosti 2021. – 2026.

The purpose of the document is to provide higher education institutions with instructions on how to develop lifelong learning programmes at the higher education level for the purposes of financing through vouchers with funds from the National Recovery and Resilience Plan 2021 - 2026 in accordance with the CROQF. Target groups are higher education institutions and ASHE.

3.1.4 The CROQF in legislation

In Croatia, the CROQF has been initially developed as a tool that could be used on a voluntary basis. It was additionally encouraged using available funds within the Erasmus+ programme, the European Social Fund and other programmes. Following the legislative changes that took place mostly in 2021 and 2022, the CROQF is now incorporated into all important legislation pertaining to quality assurance in different parts of education.

According to the **Act on Adult Education** (Official Gazette, No. 144/21), formal education programmes and evaluation programmes must be aligned with the qualification standard or unit of learning outcomes from the CROQF Register, which achieves the relevance of the programme in relation to the labour market. Non-formal education of adults for the acquisition of competencies required for work in the sense of this Law includes the implementation of non-formal education programmes that are financed through vouchers from European structural and investment funds and mechanisms for recovery and resilience aligned with the occupational standard or unit of competencies and the qualification standard or unit of learning outcomes from the CROQF Register.

According to the **Act on Vocational Education and Training** (Official Gazette, No. 30/09, 24/10, 22/13, 25/18, 69/22), in line with the 2018 Amendments, the vocational curriculum is adopted on the basis of one or more qualification standards that have been developed on the basis of one or more occupational standards in accordance with the concept of the CROQF.

In the **Act on Quality Assurance in Higher Education and Science** (Official Gazette, No. 151/22), which prescribes the criteria for the initial accreditation of studies, it is stipulated that when evaluating a study programme, the compliance of the study programme with the qualification standard entered in the CROQF Register is evaluated as well.

A new **Act on Recognition and Assessment of Foreign Education Qualifications** (Official Gazette, No. 69/22) has entered into force in Croatia. It contains provisions on automatic recognition from Council's Recommendation on promoting automatic mutual recognition of qualifications.

A new **Act on Higher Education and Scientific Activity,** adopted in 2022, regulates the link between lifelong learning programmes in higher education and the CROQF.

3.1.5 Institutional set-up of the CROQF

The national coordination point for the EQF is placed within MSEY.

According to the CROQF Act, MSEY performs the following tasks:

– adopting guidelines for the development of qualifications standards in cooperation with agencies responsible for education;

- referencing of the CROQF to the EQF and self-certification of the CROQF against the QF-EHEA;
- coordinating quality assurance related to qualifications and learning outcomes;
- developing and maintaining the IT system for the management of the CROQF Register;
- developing a system for recognition and validation of prior learning;
- monitoring and analysing the implementation of the system for the validation of learning outcomes acquired through non-formal and informal learning and proposing measures for its regulation;
- adopting guidelines and preparing other material required for implementation and development of the CROQF;
- administrative support to the NCDHP;
- developing the role of the CROQF in procedures related to the recognition and identification of qualifications.

MLPSFSP performs the following tasks:

- establishing and developing a system of information collection about current and future labour market needs and required competences;
- collecting data about changes in competences required for occupations and proposing developments of qualifications standards and occupational standards according to labour market needs;
- participating in preparation and elaboration of strategic background material, as well as analysis for developing the CROQF, aimed at enhancing employability and raising competitiveness of the Croatian economy and society;
- preparing and elaborating analytical background material and methodology for elaboration of occupational standards and managing the Sub-register of occupational standards;
- monitoring the employability of persons with acquired qualifications;
- adopting decision on entry into respective CROQF Sub-registers;
- formal and expert validation of occupational standards;
- establishing a evaluation committee for expert evaluation of occupational standards in accordance with the decision of the minister in charge of labour;
- collecting and analysing data necessary for the network interface of the labour market from institutions responsible for keeping registers from their jurisdictions, and are crucial for the development and implementation of the CROQF. The type and volume of data being exchanged are regulated by the Ordinance on the CROQF Register.

The ministry responsible for regional development performs the following tasks:

- adopting guidelines for the development of regional labour markets;
- monitoring the effects of population's qualification structure on regional development;
- analysing demands for human resources development resulting from counties' instruments of strategic planning.

ASHE, AVETAE and ETTA perform the following tasks in **accordance with their jurisdiction:**

- evaluation of compliance of learning programmes with the CROQF standards
- establishing Sectoral councils made up of stakeholders in accordance with the criteria prescribed by this Law;
- administrative and expert support to the work of the Sectoral councils;
- making decisions on entry into the appropriate CROQF sub-registers;
- monitoring the implementation and development of national qualifications frameworks of other countries;
- monitoring and analysing the implementation and development of qualifications frameworks in other countries' education policies

MSEY, in cooperation with MLPSFSP and the NCDHP, is responsible for the overall coordination and oversight of the CROQF. The council comprises of 25 representatives of national ministries, regional structures, social partners, education providers and national agencies involved in developing and awarding qualifications in various subsystems of education and training. The council oversees policies in education, training, employment and human resource development, and monitors and evaluates the CROQF's impact and the work of sectoral councils.

According to the 2021 CROQF Act, new **sectoral councils** are set up. In total, there are 25 sectoral councils, operating as advisory and professional bodies working on the development of human potential in line with labour market needs. Each has a president and 10 members (representing the ministry of the respective sector, the public employment service, the agency for quality assurance and sectoral experts), who are appointed by the agencies. Following the 2021 amendment of the CROQF Act, their role is more strategically oriented, and they are no longer in charge of assessing proposals for including occupational and qualification standards in the CROQF Register.

3.1.6 The main functions of the NQF in the national context

Principles and objectives of the CROQF are:

- ensuring conditions for high-quality education and learning according to needs for personal, social and economic development, social inclusion, as well as banishing all types of discrimination;
- developing personal and social responsibility, as well as implementation of democratic standards in respecting basic freedoms and rights, as well as human dignity;
- enhancing a role of key competences for lifelong learning;
- developing qualifications based on learning outcomes that have been defined transparently and that form the basis for dividing qualifications into different types;
- understanding various qualifications and learning outcomes, as well as their correlations;
- ensuring conditions for equal access to education during one's lifetime, for horizontal and vertical progression, acquiring of qualifications and their recognition;
- ensuring the economic growth based on development of science and technology;
- enhancing the competitiveness of the Croatian economy based on human potential;
- achieving employability, individual and economic competitiveness as well as harmonised social development based on education;

– setting up a coordinated quality assurance system for existing and future qualifications;
– developing a system of recognition and validation of non-formal and informal learning;
– establishment and sustainable development of partnerships among policy makers and stakeholders in the system of qualifications;
– easy readability and recognition of foreign qualifications in the Republic of Croatia and Croatian qualifications abroad;
– participation in the European integration process by taking into account the markers and guidelines of the EQF and QF-EHEA, EU guidelines and international regulations;
– preserving positive heritage of the Croatian educational tradition;
– enhancing and promoting education in the Republic of Croatia.

3.1.7 The main success factors related to the CROQF

The main success factors related to the CROQF implementation is use of tools that enable:

- **better response of educational and study programmes to labour market needs** Qualifications standards are developed by stakeholders on the basis of labour market needs (occupational standards) and evaluated by evaluation committees.

- **quality assurance mechanisms**

  Request for learning programmes to be aligned with qualification standards in the CROQF Register are sent to agencies in the education system (ASHE and AVETAE). The agencies in the education system make decisions on the entry of qualification standards in the CROQF Register, and MLPSFSP makes decisions on the entry of occupational standards in the CROQF, based on the opinion of the evaluation committees established by the agencies in the education system, that is, the ministry responsible for labour.

- **dialogue and cooperation between various stakeholders**

  Both MSEY with its' agencies as well as MLPSFSP are responsible for the governance of the CROQF. Daily running of the CROQF includes expert evaluation of proposals of occupational standards, performed by the permanent evaluation committee of MLPSFSP composed of different stakeholders, as well as expert evaluation of proposals of qualification standards performed by expert evaluation committees of the agencies in the education system. Besides, the NCDHP is a central strategic body of the Republic of Croatia for developing the CROQF. It is a strategic body made up of different stakeholders - representatives of education and the labour market, public and private sectors, social partners that include employers' organizations and trade unions, representatives of all levels of education.

- **public confidence and trust**

  Through its functions, the CROQF contributes to building public confidence and trust in the education and training system. Clear standards and transparent information foster trust among stakeholders, including students, parents, employers, and the wider community.

- **European aspect**

  Thanks to the link with the EQF and QF-EHEA and using qualifications frameworks in the recognition of foreign educational qualifications, holders of qualifications acquired in Croatia are able to

easily provide qualitative information and proof of their acquired competences to employers and educational institutions across Europe.

- **mobility on the labour market**

  Since the occupational standard is the result of a quantitative and qualitative examination of the needs of the labour market, the qualification standard, which is linked to it, also becomes relevant with regard to the needs of the labour market. Occupational standard contains a list of jobs that an individual performs in a certain profession and a list of competencies that are necessary for their successful performance.

- **transparency and comparability of qualifications**

  Learning outcomes, recorded in the standard of a qualification which is acquired upon completion of a certain educational programme/of the vocational curriculum and a level of qualifications and units of learning outcomes enable better vertical and horizontal comparability of qualifications.

Specifically, the main functions of the CROQF in different parts of education are:

- In vocational education and training, a goal is the **modernization of vocational education** and the development of the vocational education and training that is attractive, innovative, relevant and connected to the labour market and which will enable participants to acquire competencies for personal and professional development, as well as continuing education and lifelong learning. This will be achieved by developing new curricula with a strong link to the needs of the labour market in accordance with the CROQF. The process begins with the creation of occupational standards, followed by qualification standards, and the corresponding curricula are created based on them.
- In **adult education,** programmes which are aligned with the CROQF can directly improve employability and productivity on the labour market (there is also adult education programme for general education, which is adopted by the minister responsible for education). In adult education, the CROQF is supported through the system of vouchers. A voucher is a financial instrument for the allocation of public funds for adult education. The development of the voucher system has also been recognized by the European Commission, and significant financial resources have been provided within the framework of the National Recovery and Resilience Plan. This system enables the acquisition of micro-credentials and partial qualifications in line with the CROQF standards. The skills offered are in demand on the labour market and with a focus on green and digital knowledge and skills.
- In **higher education,** the goal is improvement and further development of the Croatian system of higher education and science in accordance with the strategic guidelines adopted at the national and European level, strengthening of a quality assurance system, with the aim of encouraging the establishment and development of study programmes relevant to the development of the economy and society, rationalization and qualitative improvement of study programmes, application of qualitative standards.

3.1.8 Communication on the CROQF, EQF and other related tools

In earlier stages of the CROQF development, communication was focused on informing the key stakeholders, such as state and **public institutions, educational institutions, employers, chambers, professional associations, trade unions and other stakeholders** who had a crucial role in the establishment of the institutional framework and development of first proposals of occupational and

qualifications standards. All relevant news and information were also available to the general public, however, since there were still no educational/study programmes aligned with the CROQF and no qualifications assigned with CROQF and EQF levels issued, individuals/end-users were not in the focus of communication activities.

However, since the implementation of the CROQF will now show clearer results closer to individuals (in terms of improved educational/study programmes and qualifications assigned with CROQF and EQF levels), additional emphasis will be put on informing **individuals/end-users** about the benefits of the CROQF, both in terms of quality and relevance of education and the possibilities which arise from its connection to the EQF. There is a need to continue organizing and taking part in specific activities in order to inform and deepen the understanding of stakeholders and the **general public** about the implementation and developments related to the CROQF, its value as a reform instrument and its relation to the EQF, as well as the related EU-level initiatives and tools.

Inclusion of various stakeholders is essential for successful implementation of the CROQF. Therefore, it is important to continue raising awareness of the role, value and mechanisms of the CROQF and its relation to the EQF, in order to encourage the stakeholders to take part in the process of its implementation and to further inform and increase understanding among relevant institutions, bodies and social partners. The core CROQF structures and bodies encompass **a wide range of stakeholders**, including employers, educational institutions, trade unions, NGOs, state and public bodies. In this context, it is particularly important to mention the **NCDHP, as well as sectoral councils.**

Also, it should be noted that MSEY has so far been developing and implementing the CROQF in close cooperation with the MLPSFSP (in charge of occupational standards). With the latest legislative changes, **public agencies** in education (previously included in CROQF procedures primarily as members of sectoral councils) have been given an even more prominent role in the implementation of the CROQF. This stakeholder approach continues to be an important element in raising awareness of the CROQF, as well as its relation to the EQF.

Besides the participation of stakeholders in CROQF bodies, the aim is to **further raise awareness in order to motivate educational institutions** to develop qualifications standards and programmes aligned with the standards and to motivate **potential learners** to take part in programmes developed in line with the CROQF methodology; all of this with a focus on the role of the CROQF in assuring the quality, relevance and transparency of qualifications, as well as in ensuring their comparability and portability at the international level, stressing the relation to and value of the EQF and the related tools.

Besides the participation of stakeholders in CROQF bodies, our aim is to further raise awareness in order to **motivate employers** to take part in identifying the labour market needs, and to perceive the value of CROQF qualifications.

3.2 Main concepts of the CROQF

3.2.1 The CROQF Register

The CROQF Register is established to comply to the needs of the system for keeping data on the key CROQF elements. The CROQF Register is public and it consists of occupational standards and units of competencies as well as of qualification standards and units of learning outcomes. There are currently 589 occupational standards, 4831 units of competencies, 471 qualification standards and 13251 units of learning outcomes in the CROQF Register (28 October 2024).

The **occupational standard** is the result of the agreement of all relevant stakeholders in the labour market and education on the optimal content of a particular occupation and on knowledge and skills with the associated autonomy and responsibility (competencies). It determines the key jobs and the competencies needed to perform those jobs for a particular profession. Competencies are grouped into logical units (**units of competences**), regardless of the type of work and key jobs. Occupational standards are developed through the research-based analysis of labour market needs and the occupational standard survey (a questionnaire initially completed by expert groups and then confirmed by employers and employees). They are then the basis for developing standards for qualifications aimed at the labour market.

The qualification standard is the content and structure of a certain qualification, and includes all the data needed to determine the level, volume and profile of the qualifications, as well as the data needed to ensure and improve the quality of the qualification standard. The qualification standard consists of several units of learning outcomes. **A unit of learning outcomes** represents the smallest complete set of related learning outcomes of a certain level, volume and profile. Education and study programmes are created based on qualification standards and units of learning outcomes entered in the CROQF Register.

Qualification standards included in the CROQF register are the basis for developing and redesigning education and training programmes.

An entry into the CROQF Register presents a basis for asserting rights that result from the referencing of the CROQF to the EQF and the self-certification of the CROQF against the QF-EHEA.

The CROQF Register is the basis for a common robust quality assurance system, for the validation of non-formal and informal learning (with equal value to formal learning) and for the transparency, access and progression, including mobility.

Entry into the CROQF Register and the quality assurance of the process

Figure 3.1: A procedure for entry into the CROQF Register starts at the request of any legal entity or a natural person, as well as at the request of national authorities providing that their interest has reasonable grounds.

A request for entry into the Sub-register of units of learning outcomes and the Sub-register of qualifications standards is submitted on a prescribed form to ASHE for qualifications at levels 5 (in the part that relates to higher education); 6.st; 6.sv; 7.1.st; 7.1.sv; 7.2; 8.1; 8.2, and AVETAE for qualifications at levels 2; 3; 4.1; 4.2, and level 5 (in the part that relates to specialist vocational training).

Requests for entry into the Sub-register for qualifications at levels 1 and 4.2 (for general education) are submitted to ETTA, while the entry into the appropriate sub-register is done by AVETAE on the basis of a Decision on entry into the appropriate sub-register by ETTA.

A request for entry into the Sub-register of occupational standards is submitted on a prescribed form to MLPSFSP.

Upon receiving the request for entry into the Sub-register of units of learning outcomes and the Sub-register of qualifications standards, ASHE or AVETAE or ETTA appoint an evaluation committee. On the basis of the evaluation committee's expert opinion, the agencies determine the fulfilment of formal and professional conditions for entry into the CROQF Register and adopt a decision on entry into the appropriate CROQF Sub-register. In case when a profession is regulated in the Republic of Croatia, the opinion of the public administration body responsible for the regulated profession is taken into account as well.

Upon receiving the request for entry into the Sub-register of occupational standards, and, on the basis of an expert opinion of a permanent evaluation committee appointed by MLPSFSP, and, in case when a profession is regulated in the Republic of Croatia, the opinion of the public administration body responsible for the regulated profession that is the subject of the proposed occupational standard, determine the fulfilment of formal and professional conditions for entry into the CROQF Register and adopt a decision on entry into the appropriate CROQF Sub-register.

As an exception, when a public administration body responsible for a regulated profession is also the propounder of the occupational standard for the regulated profession, or rather the propounder of the standard of qualification necessary for performing a regulated profession, a public administration body does not need to issue an opinion for the regulated profession for which standards are being developed.

Procedures for entry into the CROQF Register, internal and external quality assurance system and content and format of the request form as well as the content of the sub-register, are stipulated by the Ordinance on the CROQF Register, adopted by the minister responsible for education and science and subject to approval of the minister responsible for labour.

A single qualification may be acquired through more programmes offered by legal entities accredited for awarding certificates of acquired qualifications, which corresponds to the respective qualification standard.

3.2.2 **Learning outcomes**

The CROQF plays a central role in developing and implementing the learning outcomes approach in education and training. In the CROQF, the learning outcomes are expressed through knowledge, cognitive skills, practical skills, social skills and respective autonomy and responsibility.

The CROQF has eight levels of units of learning outcomes: 1; 2; 3; 4; 5; 6; 7; 8. Reference levels express the complexity and scope of acquired learning outcomes. Their descriptors represent minimal conditions for placing units of learning outcomes at respective CROQF levels. Higher levels of units of learning outcomes include lower levels of a respective profile.

Table 3.1: Descriptors of levels of learning outcomes have been outlined in the CROQF Act.

LEVEL	KNOWLEDGE	SKILLS			AUTONOMY	RESPONSABILITY
		Cognitive skills	Practical skills	Social skills		
8	Creating and evaluating new facts, concepts, procedures, principles and theories in a field of research that extends the frontier of knowledge;	Using advanced, complex, original, highly specialized knowledge, skills, activities and procedures required for developing new knowledge and new methods as well as for integrating different fields.	Creating, evaluating and performing new proposed specialized activities and new methods, instruments, tools and materials.	Creating and applying new social and generally acceptable forms of communication and cooperation in interaction with individuals and groups of different affiliations and different cultural and ethnical origin.	Demonstrating personal professional and ethical authority, managing scientific research activities and a commitment to development of new ideas and/or processes.	Taking ethical and social responsibility for successful execution of research, socially beneficial results and potential social consequences.
7	Evaluating highly specialized knowledge in a field of work and/or learning some of which are at the forefront of the field and can provide the basis for original thinking and/or scientific research as well as for integrating different fields of knowledge.	Critical evaluation and creative thinking in solving new and complex problems, required as the basis for the development of new knowledge and the ability to integrate knowledge in different fields in unpredictable situations.	Performing complex activities and applying complex methods, instruments, tools and materials, developing instruments, tools and materials required in research and innovation processes and adjusting complex methods.	Managing and leading a complex communication process, interactions with others and cooperation in different social groups in unpredictable social situations.	Managing and leading development activities in unpredictable surrounding conditions and making decisions in uncertain conditions.	Taking personal and group responsibility for strategic decision-making and successful execution and completion of tasks in unpredictable situations, as well as social and ethical responsibility during the execution of tasks and for their resulting consequences.
6	Evaluating specialized facts, concepts, procedures, principles and theories in a field of work and/or learning, including their critical comprehension.	Collecting, interpreting, estimating, selecting and creatively applying different relevant facts, concepts and procedures required to generate solutions and for solving complex tasks or problems within a specialized field of work in unpredictable situations, as well as ability to transfer knowledge to other areas and problems.	Performing complex activities and applying complex methods, instruments, tools and materials in unpredictable situations, developing instruments, tools and materials and adjusting complex methods.	Managing complex communication, interactions with others and cooperation in different social groups in unpredictable social contexts.	Managing professional projects in unpredictable situations.	Taking ethical and social responsibility for managing and evaluating professional individual and group development in unpredictable situations.
5	Analysing, synthesizing and evaluating specialized facts, concepts, procedures, principles and theories in a field of work and/or learning, evaluating, giving rise to an awareness of the frontier of knowledge.	Interpreting, estimating, selecting and creatively applying different relevant facts, concepts and procedures required to generate solutions and for solving complex tasks or problems within a specific field of work and/or learning in partially unpredictable situations, as well as ability to transfer knowledge to other areas and problems.	Performing complex actions and applying complex methods, instruments, tools and materials in partially unpredictable situations, developing instruments, tools and materials and adjusting simple methods.	Partial management of complex communication in interactions with others and establishing cooperation in a group in partially unpredictable social contexts.	Taking part in the management of activities in partially unpredictable situations.	Taking responsibility for managing evaluation and for improving activities in partially unpredictable situations.
4	Analysing wider spectrum of facts, concepts, procedures, principles and theories in a field of work and/or learning.	Simple abstract logical thinking required to analyse available facts, concepts and procedures in the course of execution of a series of complex tasks in a field of work and/or learning in situations that are subject to change.	Performing a set of complex actions and applying complex methods, instruments, tools and materials (in executing a series of specific complex tasks) in situations that are subject to change.	Realization of complex communication in interactions with others and a possibility of cooperation in a group in social contexts that are subject to change.	Executing a set of complex tasks and adapting one's own behaviour to a set of given guidelines in situations that are subject to change.	Taking responsibility for evaluating and improving activities in situations that are subject to change.
3	Comprehending facts, concepts, procedures and principles important for a field of work and/or learning in partially familiar situations.	Explaining, estimating, selecting and using important facts, concepts and procedures required to execute a series of complex, defined tasks or problems within specific field of work and/or learning in familiar situations.	Performing complex actions by applying a set of different simple methods, instruments, tools and materials in partially familiar conditions.	Realization of complex communication in interaction with other individuals and possibility of cooperation in a group in familiar social contexts.	Executing a set of complex tasks and adapting own behaviour to a set of given guidelines in familiar situations.	Taking responsibility for executing a set of complex tasks in familiar situations.
2	Comprehending basic facts and concepts in simple and familiar situations specific to a field of work and/or learning.	Concrete logical thinking required to apply known facts and procedures in the course of execution of a series of simple connected tasks in familiar situations.	Performing actions and applying simple methods, instruments, tools and materials in familiar conditions.	Realization of simple communication and cooperation in interaction with other individuals in familiar social contexts.	Executing simple tasks under direct and occasional supervision in familiar situations.	Taking responsibility for executing simple tasks and relationships with other individuals in familiar situations.
1	Comprehending basic general facts and concepts in simple and familiar everyday situations.	Simple concrete logical thinking required to execute simple, clearly defined tasks in familiar situations.	Performing simple actions in familiar situations.	Following general rules of behaviour in familiar social contexts.	Executing simple tasks under direct and constant professional supervision in familiar situations.	Taking responsibility for executing simple tasks in familiar situations.

3.2.3 Workload/Volume of qualifications and units of learning outcomes – CROGE, CSVET and ECTS

Volume is determined for each qualification and a unit of learning outcomes. It refers to an average of a total amount of time spent for acquiring a respective qualification, or a unit of learning outcomes, respectively.

In the course of latest amendments of the Act on CROQF (2021) a decision was made to redefine credit points for vocational qualifications. Main reason was clearer understanding of ECVET, that was a credit system in VET comprising of more than points and the fact that it was not equivalent to ECTS credits in higher education which was also recognised in the Council Recommendation of 24 November 2020 on vocational education and training (VET) for sustainable competitiveness, social fairness and resilience 2020/C 417/01 (VET Recommendation) that stated that the concept of ECVET credits was generally not applied and ECVET did not lead to the development of a European credit system in vocational education and training and which replaced the Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Credit System for Vocational Education and Training (ECVET). For that reason, CSVET (Croatian Credit System for Vocational Education and Training) credits were introduced. Furthermore, it was decided that vocational qualifications will only have one set of credit points - CSVET credits, instead of previous division to ECVET and CROGE (Croatian Credit System for General Education) credits.

An average of a total amount of time spent is expressed in the ECTS (European Credit Transfer and Accumulation System) credits for higher education, CSVET credits for vocational education and the CROGE credits for general education.

One CROGE includes 15 to 25 hours of study work in the duration of 60 minutes, as required for acquiring respective learning outcomes. One CSVET includes 15 to 25 hours of study work in the duration of 60 minutes, as required for acquiring respective learning outcomes. One ECTS includes 25 to 30 hours of study work in the duration of 60 minutes, as required for acquiring respective learning outcomes.

A minimal volume of a single unit of learning outcomes is 1 CROGE, CSVET or ECTS credit, respectively.

3.2.4 Types of Qualifications in the CROQF

Within the CROQF, a distinction is made between several types of qualifications.

Qualification acquired upon the completion of primary education is the basis for vertical and horizontal progression in the system of education and training and lifelong learning in the Republic of Croatia.

Qualifications acquired upon the completion of vocational education attest the acquisition of basic and vocational competencies for obtaining qualifications that enable the pursuit of occupations and further education, the competence to live and work in a changing socio-cultural context according to the requirements of the market economy, modern information and communication technologies, and scientific knowledge and achievements, as well as lifelong learning in accordance with the needs of the society, for the purpose of personal development and the economic and general development of society.

Qualifications acquired upon the completion of arts education attest the acquisition of knowledge, skills and abilities in various artistic fields which form the framework for the development of individuals' creative potential, the competence to live and work in a changing socio-cultural context according to the requirements of the market economy, modern information and communication technologies and scientific knowledge and achievements, and in accordance with social needs, and creates a basis for

lifelong learning for the purpose of personal development and the economic and general development of society.

Qualifications acquired upon the completion of general secondary education attest the acquisition of basic (general education) and professional competencies, the competence to live and work in a changing socio-cultural context according to the requirements of the market economy, modern information and communication technologies, and scientific knowledge and achievements, as well as the competence for lifelong learning in accordance with the needs of the society.

Qualifications acquired upon the completion of professional studies attest the appropriate level of knowledge and skills that enable the pursuit of occupations and the competence for immediate involvement in the work process, as well as for living and working in a changing socio-cultural context according to the requirements of the market economy, modern information and communication technologies, and scientific knowledge and achievements, as well as lifelong learning in accordance with the needs of the society.

Qualifications acquired upon the completion of university studies attest the competence for working in the fields of science, arts and higher education, in the business world, public sector and society in general, as well as for the development and implementation of scientific, artistic and professional achievements, the competence to live and work in a changing socio-cultural context according to the requirements of the market economy, modern information and communication technologies, and scientific knowledge and achievements, as well as the competence for lifelong learning in accordance with the needs of the society.

3.2.5 Full and partial qualifications

According to the 2021 amendment to the CROQF Act, the CROQF has thirteen levels which are compatible with the EQF.

Full qualifications acquired in the Republic of Croatia

Full qualifications acquired in the Republic of Croatia are assigned to levels of the CROQF, while the minimal entry requirements and minimal requirements for acquiring full qualifications are as follows:

Table 3.2: CROQF levels of full qualifications and entry requirements.

CROQF level of full qualification	Description	Total workload	Entry requirements
1	qualification acquired upon the completion of primary education	minimum of 480 CROGE credits	
2	qualifications acquired upon the completion of vocational and arts training	minimum of 20 CSVET credits of Level 2 or a higher level of learning outcomes	previously acquired Level 1 qualification
3	qualifications acquired upon the completion of secondary education in less than three years	minimum of 60 CSVET or CROGE credits of Level 3 or a higher level of learning outcomes	previously acquired Level 1 qualification
4.1	qualifications acquired upon the completion of secondary education in three to less than four years	minimum of 180 CSVET credits, with at least 120 CSVET credits of Level 4 or a higher level of learning outcomes	previously acquired Level 1 qualification

4.2	qualifications acquired upon the completion of secondary education in four years or more	minimum of 240 CSVET and/or CROGE credits, with at least 150 CSVET and/or CROGE credits of Level 4 or a higher level of learning outcomes	previously acquired Level 1 qualification
5	qualifications acquired upon the completion of professional studies with less than 180 ECTS or CSVET credits; vocational post-secondary development and training; programmes for master craftsmen with at least two years of assessed work experience	minimum of 60 CSVET or 120 ECTS credits, with at least 30 CSVET or 60 ECTS credits of Level 6 or a higher level of learning outcomes	previously acquired Level 4.1 or higher qualification
6.st	qualifications acquired upon the completion of undergraduate professional studies	minimum of 180 ECTS credits, with at least 120 ECTS credits of Level 6 or a higher level of learning outcomes	previously acquired Level 4.2 or Level 5 qualification, plus passing obligatory State Matura courses
6.sv	qualifications acquired upon the completion of undergraduate university studies	minimum of 180 ECTS credits, with at least 120 ECTS credits of Level 6 or a higher level of learning outcomes	previously acquired Level 4.2 or Level 5 qualification, plus passing obligatory State Matura courses
7.1.st	qualifications acquired upon the completion of specialist graduate professional studies	minimum of 60 ECTS credits of Level 7 or higher level of learning outcomes, totaling at least 300 ECTS credits with previously acquired Level 6 qualification	previously acquired Level 6.st or Level 6.sv qualifications
7.1.sv	qualifications acquired upon the completion of university graduate studies and integrated undergraduate and graduate university studies	minimum of 60 ECTS credits of Level 7 or higher level of learning outcomes, with at least 300 ECTS credits of Level 6 and 7 combined, including a minimum of 60 ECTS credits of Level 7	previously acquired Level 4.2 or Level 5 qualification, plus passing obligatory State Matura courses
7.2	qualifications acquired upon the completion of postgraduate specialist studies	minimum of 60 ECTS credits of Level 7 or higher level of learning outcomes	previously acquired university graduate qualification or integrated undergraduate and graduate university studies, in accordance with requirements set by a university or its constituent by a general legal act and on the condition of meeting the requirements set by a study programme of a university or its constituent

8.1	qualifications acquired upon the completion of postgraduate research Master of Science studies	includes at least one year of scientific or artistic research in full-time equivalent, resulting in at least one published original scientific article with relevant international peer review	
8.2	qualifications acquired upon the completion of postgraduate university (doctoral) studies	at least three years of scientific or artistic research in full-time equivalent, resulting in original scientific articles with relevant international peer review; exceptionally, a qualification is acquired in accordance with the exceptions for acquiring a doctorate in science or doctorate in the arts prescribed by the act that governs scientific activity and higher education	previously acquired Level 7.1.un qualification, in accordance with requirements set by a university or its constituent by a general legal act and on the condition of meeting the requirements set by a study programme of a university or its constituent

Partial qualifications

The CROQF also recognizes the standards for partial qualifications, which can be the basis for the development of microcredentials. Partial qualifications were part of the CROQF structure from the early stage of the development of the CROQF, but their number and use significantly increased with adoption of EU level policies on microcredentials. Standards for partial qualifications are separate standards in the CROQF Register (but they can be developed, if applicable, based on the standards for full qualifications).

Table 3.3: CROQF Levels of partial qualifications and entry requirements.

CROQF level of partial qualification	Entry Requirements	Precondition
2	Full Level 1 qualification	Minimum of 10 respective CROGE, CSVET, or ECTS credits, with at least 50% at the level of the respective partial qualification
3	Full Level 1 qualification	
4	Full Level 1 qualification	
5	Full Level 4.1 qualification	
6	Full Level 4.2 or higher qualification	
7	Full Level 4.2 or higher qualification	

Partial qualifications acquired in the Republic of Croatia are assigned to levels of the CROQF.

3.3 The CROQF and related policy initiatives

3.3.1 Microcredentials and the CROQF

Microcredentials in Croatia, including system of vouchers

In recent years, the development of microcredentials has been encouraged in Croatia in accordance with European policies, especially using the instrument of vouchers.

One of the most important new values within the new Act on Adult Education was the establishment of a voucher system and the implementation of micro-credentials (in Croatia, the name in use is: micro-qualifications) in the adult education system of the Republic of Croatia.

AVETAE developed a detailed 'Methodology for creating adult education programmes for acquiring micro-qualifications, partial qualifications and complete qualifications financed through vouchers and other sources of financing'. The methodology provides clear instructions for planning, creating and developing educational programmes in the field of adult learning. Alongside the methodology, AVETAE also developed 25 examples of qualification standards, which can be used as a basis for creating programmes validated by the institution responsible for its development.

Voucher system was introduced in collaboration of four institutions, MLPSFSP, MSEY, AVETAE and the Croatian Employment Service.

One of the key challenges to skills acquisition is the low rate of adult participation in lifelong learning. The acquisition of new skills through the voucher system will enable an increase in employability and a better matching of supply and demand on the labour market. In particular, the aims of the voucher system are to increase the share of adult citizens in lifelong learning, increase employees' competencies, ensure quality workforce and enable an easier transition to employability.

Vouchers are provided by adult education providers. The voucher system is defined by the Adult Education Act in Article 17, which for the first time enables citizens to attend adult education programmes free of charge. Citizens' education is financed through vouchers from various sources and for various types and forms of programmes, and to the greatest extent it will be completely free. Vouchers are financed from public funds exclusively for programmes created on the basis of CROQF, and most often they are also done with micro-qualifications. Micro-qualifications in short adult education programmes are based on units of learning outcomes from the CROQF Register and include levels 2 to 5 of the CROQF.

The novelty of those programmes leading to micro-credentials also lies in their type of financing, as they introduce vouchers for people engaged in education. Vouchers have been issued by the Croatian Employment Service from April 2022. Currently more than 230 adult education institutions were listed in the Catalogue of skills and programmes with approximately 2000 programmes available, including a vast number of programmes honing digital and green skills. Learners who are granted a voucher receive EUR 1 300 on average. Micro-credentials promoted through this voucher system have already become one of the most forward-looking measures in attracting learners to adult education, while ensuring that the education provided is aligned with labour market needs.

An IT application for management and allocation of vouchers has been developed and is available at the following link: https://vauceri.hzz.hr/. The application also contains a catalogue of skills that shows existing and necessary green and digital skills on the labour market, and is available at the following links: https://vjestine.hzz.hr/ (for education providers) and https://vauceri.hzz.hr/katalog-vjestina/ (for voucher users).

Since the launch, the system has primarily focused on acquiring green and digital skills in demand on the labour market with the planned goal of including 30,000 users in education, for which funds have

been secured from the National Recovery and Resilience Plan 2021-2026. Later on, a system upgrade was introduced that enables the award of vouchers for education programmes that acquire or improve other skills required on the labour market, not only those related to the green and digital transition. Funds from the European Social Fund + with the planned inclusion of additional users in education until 2027 have been secured for the upgrade of the education voucher system.

In higher education, in Croatia, micro-credentials are not defined as a term in higher education regulations but the Croatian higher education system recognizes education programmes that essentially represent what are considered micro-credentials. A new Act on Higher Education and Scientific Activity has been adopted in 2022, which regulates the link between lifelong learning programmes in higher education and the CROQF. According to the new Act, higher education institutions can offer lifelong learning programmes (adult education/micro-credentials) whose competences should be aligned with the occupational standard or units of competences and the qualification standard or unit of learning outcomes from the CROQF Register which also includes applied ECTS credits. In this way, it is ensured that the competences acquired at the end of such shorter education programmes, which do not constitute a study, are aligned with the needs of the labour market or they ensure the acquisition of learning outcomes necessary for continuing education. The lifelong learning programmes that are aligned with the CROQF can be financed through vouchers for the purpose of accessing the labour market.

Inclusion of micro-credentials in the QF for higher education has a potential to enhance relevance of programmes with regard to the needs of the labour market, especially since today's labour market requires faster adaptation to new working conditions and new skills. Strong cooperation between higher education and employers is encouraged through the instruments of the CROQF, which represents quality base for developing shorter learning opportunities (micro-credentials) in partnership with the economic sector. Moreover, quality of micro-credentials will be achieved since QF implies certain procedures that ensure quality, but maintain flexibility, which is crucial for such programmes. Higher education institutions are now encouraged to develop programmes in line with this legal base and procedures to benefit from its potential.

An important starting document is a document comprising the Instructions for developing, aligning and approving educational programmes of higher education institutions at the higher education with the CROQF Register for the purposes of financing via vouchers with funds from the National Recovery and Resilience Plan 2021-2026, requiring the linking of learning outcomes obtained at the end of short training programmes at the level of higher education with CROQF standards. The instructions were developed for the purposes of financing short education programmes through vouchers funded from the National Recovery and Resilience Plan 2021-2026, where one of the financing conditions is the compliance of the educational programme with the CROQF Register. Alignment of these educational programmes with the CROQF is a part of the internal system of quality assurance within higher education institutions and periodically, in an appropriate manner, of the external quality assurance mechanisms.

3.3.2 Enhancement of teacher competencies

From 2017 to 2021, AVETAE implemented the 1,6 MIL EUR ESF project called "Modernization of the professional training system for teachers of vocational subjects" with the aim of improving the existing system of professional training for teachers. Based on the analysis of documents of European educational policies in the field of education and training of vocational teachers, examples of good practice in the international environment, and conducted research at the national level, AVETAE has developed a new Model of professional training for teachers. The professional development model includes a wide spectrum of interdisciplinary topics detected within the framework of the need for the development

of new competencies of vocational teachers. In this context, the content of the Model is structured through three key areas:

1. Strengthening of pedagogical and specific methodological competencies of teachers

2. Strengthening the professional competencies of teachers and cooperation with labour market stakeholders

3. Improvement of quality culture and development of competencies for lifelong learning.

Each area includes core and optional modules with stated contents and learning outcomes of each module. Basic modules include the necessary competencies required in vocational education. Elective modules include specific topics and competencies that participants can join if they are particularly interested in an area or need specific knowledge. Competencies acquired through formal pedagogic-psychological-didactic-methodological education of teachers are upgraded with basic and optional modules. The modules are assigned corresponding credit points, where one (1) credit point corresponds to the student's workload of 24 to 30 working hours, including direct teaching, independent work and all activities necessary for the successful completion of the module.

The list, scope, as well as the method of execution of the modules proposed by the model are subject to regular adaptation, expansion or change in accordance with the needs of vocational education, but also of the economy. Thus, in 2021, based on the external evaluation, the model was revised and supplemented with new modules. Special attention was paid to achieving cooperation and establishing partnerships with employers and strengthening the pedagogical competencies of mentors at employers.

As part of the project, an online portal for support of professional development of teachers of vocational subjects (https://edu.asoo.hr) was created and implemented, where all information for stakeholders in the system of professional development of teachers in the mentioned areas is combined.

MSEY implemented the Educa-T project (*Emphasis on developing and upgrading of competencies for academic teaching*) which was aimed at improving the quality of learning and teaching in higher education, strengthening the role of university teachers and strengthening awareness of the importance of improving the quality of learning and teaching in higher education. Within the mentioned project, a *Handbook for the improvement of the competence of teachers in higher education was created* (further in the text: *the Handbook*).

The results of the Educa-T project and the Handbook were the starting point of the BAQUAL project working group in Croatia. The aim of the Better Academic Qualifications through Quality Assurance - BAQUAL project, with Croatia, Northern Macedonia and Montenegro as the participating countries, was to encourage the use of qualifications frameworks in internal and external quality assurance procedures in higher education. All three countries have adopted relevant legislation to implement and make full use of the qualifications frameworks to ensure and increase the quality of higher education within the objectives and principles of the EHEA.

Using the *Handbook*, methodologies and guidelines of the CROQF and its knowledge and work experience as a teacher in higher education, the working group created, in accordance with the instructions of the *Methodology for the creation of occupational standards of the MLFSP*, a concept of occupational standards for t*eacher in Higher Education* that contained a list of key jobs, knowledge and skills, as well as a job description and a list of conditions of work for teachers in higher education. The proposal went through a formal evaluation by MLFSP and expert evaluation by the Committee for Evaluation of Occupational Standards. After receiving a positive opinion, the standard was approved in the CROQF Register on 10 June 2022.

Since the idea is for the qualification standard to be a generally accepted standard at the national level, and it will also serve for the creation and evaluation of the programme, a working group was established to

create a partial standard for the qualification *Teacher in higher education*, which involved representatives of various higher education institutions. The proposal of the partial qualification standard was made in accordance with the *Guidelines for the development of qualification standards in higher education*, and the basis for the preparation was the mentioned *Handbook* from the Educa-T project, the occupational standard *Teacher in higher education*, the guidelines of the CROQF and professional knowledge and experience of members of the working group. After submitting the qualification standard proposal for evaluation, ASHE performed a formal evaluation, while the evaluation committee checked the quality of the standard. The standard was approved in the CROQF Register on 13 July 2023.

On the basis of the developed proposal of the qualification standard, a programme for improving the teaching competencies of teachers in higher education was developed.

3.3.3 Recognition of non-formal and informal learning

Since 2013, when the Act on the CROQF was established, recognition or validation of non-formal and informal learning is being incorporated in many strategic documents which implies that validation has gained significance throughout years.

In **adult education**, the validation system is being framed within the new Adult Education Act (Official Gazette 144/21) and the forthcoming ordinance. The Act stipulates that validation of previous learning shall be carried out through validation programmes on levels 2 to 5 of the CROQF. The validation programmes shall be created by adult education institutions and validated by AVETAE and MSEY. Validation programmes enable validation of previous learning and gaining microcredentials (microqualifications), partial qualifications and full qualifications. The adoption of units of learning outcomes, i.e., competences is proven by the public document. The Act also stipulates that these programmes can be implemented only by institutions with high quality standard rating and certain experience in implementing educational programmes for respective qualifications. The validation programmes enable the validation of prior learning in accordance with the appropriate standard from the CROQF Register, i.e., they must identify which units of learning outcomes need to be demonstrated during validation to qualify for certification, and suggest assessment methods to use, including any relevant instruments necessary for the implementation of the assessment.

The Rulebook on Application and Validation of Prior Learning came into force in June 2024. With the release of the Rulebook, the system of validation of prior learning, which was previously regulated by the Adult Education Act, is finally implemented in the system of adult education in Croatia. The procedure of applying for validation programs, preconditions for enrolment in the programmes, the process itself, roles and bodies for the award of qualification gained through validation programmes is prescribed by the ordinance. The skills and knowledge are measured against the same standards regulated by the CROQF.

The Methodology for the development of validation programmes was developed and published in September 2024 by the AVETAE, and AVETAE is in the process of educating and preparing the practicioners in validation procedures and assessment methods. The first validation programmes are expected in 2025.

As a public document is obtained after passing the validation programme, a lot of attention is paid to ensuring the quality of the institutions that would implement the programmes. Since a very high level of quality of the institution is a prerequisite for the implementation of the evaluation programme, prior to introduction of the validation programmes, it is necessary to carry out an external evaluation of all institutions, which is expected in the next 5 to 7 years.

In adult education, records are kept on institutions, education programmes and validation programmes, participants, applicants, external evaluation of institutions, andragogic leaders, teachers in adult education, records on other data important for monitoring the situation and development of activities, and for these purposes, the National Information System for Adult Education, which is under the competence of the ministry responsible for education, is established.

In **higher education,** RPL is not stipulated by the legislation. The Act on Amendments to the CROQF Act (Official Gazette, No. 64/18) stipulates that in case of higher education qualifications (starting with the level 6), higher education institutions are allowed to develop internal RPL procedures and stipulate them by their internal acts. Moreover, the Act stipulates that a request for RPL cannot be submitted in order to gain a full qualification in higher education. Quality assurance of RPL is also stipulated and included into the regular assessment of quality assurance at higher education institutions.

Therefore, in 2023, the Ministry of Science and Education disseminated to all higher education institutions in Croatia *the National Guidelines for Recognition of Prior Learning in the Higher Education System* in order to support the integration of RPL in internal acts of higher education institutions so that RPL becomes a part of regular activities of higher education institutions. The Guidelines present the outcome of several international projects and subsequent piloting at the University of Rijeka in order to modify them to national circumstances. The Guidelines include:

- pre-conditions for introducing RPL at higher education institutions;
- principles of RPL;
- four phases of recognition and validation of RPL; and
- RPL methodology and tools.

MSEY expects that the wider use of RPL will increase access to higher education, notably attract non-traditional students with work experience. Consequently the policy goal is to use RPL in order to increase a rate of population with tertiary education. The ESF+ will be used to further encourage higher education institutions to implement RPL.

3.3.4 Recognition of Foreign Qualifications in Croatia

A new Act on the Recognition and Assessment of Educational Qualifications entered into force on 25 June 2022.

The **assessment** of a foreign education qualification is carried out for the purpose of employment in the Republic of Croatia. Article 8 stipulates that authorities responsible for the assessment of a foreign education qualification for the purpose of employment (ASHE, AVETAE, ETTA) should assess the level of the foreign qualification in the national qualifications framework of the awarding country, as well as its reference to the EQF and QF-EHEA, in order to identify a corresponding level in the CROQF.

The **recognition** of a foreign education qualification is carried out for the purpose of continuing education in the Republic of Croatia. Article 15 stipulates that authorities responsible for the recognition of a foreign education qualification for the purpose of continuing education (ASHE, AVETAE, ETTA) should apply three obligatory criteria. The first one is that the level of a foreign qualification should be equal to the qualification level required for continuing education in the Republic of Croatia. It is implied that national qualifications frameworks, EQF/QF-EHEA should be used in order to determine the compliance with this criteria.

Moreover, Article 18 on automatic recognition stipulates that higher education institutions and ASHE should apply automatic recognition of a foreign education qualification if a qualification has been

obtained in the country with the national qualification framework referenced to the EQF and QF-EHEA and if external quality assurance of a higher education institution has been carried out by the EQAR-registered agency.

3.3.5 **Academic integrity**

In line with the strategic documents adopted by the ministers of the EHEA, notably the Tirana Communiqué (2024), academic integrity implies 'academic integrity as a set of behaviours and attitudes in the academic community internalising and furthering compliance with ethical and professional principles and standards in learning, teaching, research, governance, outreach, and any other tasks related to the missions of higher education. Mid-term activities related to the academic integrity include:

- a report on current activities related to academic integrity at higher education institutions in Croatia
- recommendations for reinforcing academic integrity standards and
- organising several PLAs for staff and students of higher education institutions aimed at dissemination of recommendations.

Updated referencing to the EQF

4. Updated referencing to the EQF

4.1 Response to the EQF Criteria and Procedures: Criteria and procedures for referencing national qualifications frameworks or systems to the European Qualifications Framework (EQF)

Table 4.1: CROQF levels aligned with European qualifications framework (EQF) levels (source: CEDEFOP).

CROQF level	Qualification type	EQF level
8.2	Postgraduate doctoral degree – PhD (*doktorski studij*)	8
8.1	(Pre-Bologna) postgraduate research / artistic master's degree – MPhil (*poslijediplomski znanstveni/umjetnički magistarski studij*)	
7.2	Advanced master's / postgraduate university specialisation study (*sveučilišni specijalistički studiji*)	7
7.1.sv	Master's diploma ▪ graduate university studies (*sveučilišni diplomski studiji*) ▪ integrated undergraduate and graduate university studies (*sveučilišni integrirani prijediplomski i diplomski studij*)	
7.1.st	Professional master's diploma – graduate professional studies (*stručni diplomski studiji*)	
6.sv	Bachelor's diploma – undergraduate university studies (*sveučilišni prijediplomski studiji*)	6
6.st	Professional bachelor's diploma – undergraduate professional studies (*stručni prijediplomski studiji*)	
5	Professional higher education diploma / associate degree – short-cycle study (*stručni kratki studiji*) VET post-secondary development certificate (*strukovno specijalističko usavršavanje*) Master craftsman's diploma (*programi za majstore uz najmanje dvije godine vrednovanog radnog iskustva*)	5
4.2	Upper secondary general education school leaving certificate (*Gimnazijsko srednjoškolsko obrazovanje*) Upper secondary VET certificate – 4 years or more (*Strukovno srednjoškolsko obrazovanje u trajanju od četiri ili više godina*)	4
4.1	Upper secondary VET – 3 years or more, but shorter than 4 years (*Trogodišnje strukovno obrazovanje u trajanju od tri ili dužem od tri, a kraćem od četiri godine*)	
3	Upper secondary VET certificate –shorter than 3 years (*Srednjoškolsko strukovno obrazovanje u trajanju kraćem od 3 godine*)	3
2	Vocational and artistic training certificate (*Strukovno i umjetničko osposobljavanje*)	2
1	Primary education certificate – 8 years (*Osnovno obrazovanje*) (*)	1

1. The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process are clearly determined and published by the competent authorities.

The national coordination point for the EQF is placed within MSEY. According to the Law on the CROQF, MSEY performs the following tasks:

- adopting guidelines for the development of qualifications standards in cooperation with agencies responsible for education;
- referencing of the CROQF to the EQF and self-certification of the CROQF against the QF-EHEA;
- coordinating quality assurance related to qualifications and learning outcomes, in line with the Law;
- developing and maintaining the IT system for the management of the CROQF Register;
- developing a system for recognition and validation of prior learning;
- monitoring and analysing the implementation of the system for the validation of learning outcomes acquired through non-formal and informal learning and proposing measures for its regulation;
- adopting guidelines and preparing other material required for implementation and development of the CROQF;
- administrative support to the NCDHP;
- developing the role of the CROQF in procedures related to the recognition and identification of qualifications.

MLPSFSP performs the following tasks:

- establishing and developing a system of information collection about current and future labour market needs and required competences;
- collecting data about changes in competences required for occupations and proposing developments of qualifications standards and occupational standards according to labour market needs;
- participating in preparation and elaboration of strategic background material, as well as analysis for developing the CROQF, aimed at enhancing employability and raising competitiveness of the Croatian economy and society;
- preparing and elaborating analytical background material and methodology for elaboration of occupational standards and managing the Sub-register of occupational standards;
- monitoring the employability of persons with acquired qualifications;
- adopting decision on entry into respective CROQF Sub-registers;
- formal and expert validation of occupational standards;
- establishing an evaluation committee for expert validation of occupational standards in accordance with the decision of the minister in charge of labour;
- collecting and analysing data necessary for the network interface of the labour market from institutions responsible for keeping registers from their jurisdictions, and are crucial for the development and implementation of the CROQF. The type and volume of data being exchanged shall be regulated by the Ordinance on the CROQF Register.

The ministry responsible for regional development performs the following tasks:

– adopting guidelines for the development of regional labour markets;

– monitoring the effects of population's qualification structure on regional development;

– analysing demands for human resources development resulting from countries' instruments of strategic planning.

ASHE, AVETAE and ETTA perform the following tasks in accordance with their jurisdiction:

– evaluation of compliance of learning programmes with the CROQF standards

– establishing Sectoral councils made up of stakeholders in accordance with the criteria prescribed by this Law;

– administrative and expert support to the work of the Sectoral councils;

– making decisions on entry into the appropriate CROQF sub-registers;

– monitoring the implementation and development of national qualifications frameworks of other countries;

– monitoring and analysing the implementation and development of qualifications frameworks in other countries' education policies

2. There is a clear and demonstrable link between the qualifications levels in the national qualifications frameworks or systems and the level descriptors of the EQF.

To demonstrate the link between the qualifications levels in the CROQF and the EQF level descriptors, the Working Group of the CROQF Expert Team commissioned a detailed technical comparison of the two frameworks for the purpose of the original referencing report. The detailed report is presented, and a brief summary is provided here as the response to this criteria.

There is a strong correspondence between the CROQF and the EQF in the understanding of the meanings of the learning outcomes on which they are based.

A close analysis of the outcomes statements in the CROQF and the EQF confirms that the CROQF levels 5 through 8.2 can be referenced to EQF levels 5 through 8, and that further correspondences were confirmed in descending order between CROQF levels 4.1 and 4.2 and EQF level 4, between CROQF level 3 and EQF level 3, between CROQF level 2 and EQF level 2, and between CROQF level 1 and EQF level 1.

The 2021 amendment to the CROQF Act introduced changes in the CROQF levels in higher education. According to the CROQF Act, the framework has 13 levels with a slight change of level descriptors.The amendment of the CROQF Act was subject to a broad public debate. In Appendix A »Descriptors of levels of learning outcomes«, level 7, in the second column »Descriptors of levels of learning outcomes« in the domain »Knowledge« the words: »and scientific research« are replaced by the words: »and/or scientific research«.

The law regulates the placement of qualifications at the levels of CROQF, in such a way that the levels of qualifications obtained at the end of professional and university studies are now clearly distinguished, while accepting their value and diversity.

Level 6.st covers professional bachelor's diplomas, while 6.sv includes university bachelor's diplomas. Similarly, levels 7.1.st and 7.1.sv respectively include professional and academic master's diplomas.

The fundamental difference between professional and university studies stems from the different learning outcomes that are acquired in different types of studies. The descriptions of learning outcomes defined by the CROQF focus on the complexity and content of learning outcomes, and not on the type of study or the institutional context in which these outcomes are acquired.

This placement of qualifications into levels respects the tradition and continuity of the Croatian higher education and the fact that former (dodiplomski) professional studies that lasted at least four years (e.g., teaching), as well as university studies, were immanent to level 7.

Qualifications acquired at university and professional studies differ in the share of knowledge and skills in learning outcomes.

The diversity of university and professional studies is recognized by the use of the CROQF in the content and complexity of learning outcomes and their purpose. Graduates of university studies are directed to work in science, art and higher education, the public sector, etc., and they open the possibility of enrolling in doctoral studies, but they also train them to perform professional occupations. On the other hand, graduates of professional studies are directed primarily to the performance of professional occupations and direct involvement in the work process.

3. The national qualifications frameworks or systems and their qualifications are based on the principle and objective of learning outcomes and related to arrangements for validation of non-formal and informal learning and, where appropriate, to credit systems.

The concept of **learning outcomes** was adopted in the CROQF: knowledge and skills (including social skills) and the associated autonomy and responsibility, which may be considered to be an optimal, understandable and measurable structure. Qualification includes a set of units of learning outcomes of a certain level, volume, certified by a certificate or diploma or some other official document issued by a competent body. The reference level of a unit of learning outcomes is determined by means of level descriptors and expressed numerically (1 through 8 in the CROQF).

The value of the volume is expressed in ECTS, CSVET or CROGE credits.

Since 2013, when the CROQF Act was established, recognition or **validation of non-formal and informal learning** is being incorporated in many strategic documents which implies that validation has gained in significance throughout years. The approach to validation is separated for adult education and for higher education.

The 2022 Adult Education Act stipulates that validation of previous learning shall be carried out through validation progammes on levels 2 to 5 CROQF. The validation programmes shall be created by adult education institutions and validated by AVETAE and the MSEY. Validation programmes enable validation of previous learning and gaining microcredentials (microqualifications), partial qualifications and full qualifications. The adoption of units of learning outcomes, i.e., competences is proven by the public document.

The Act also stipulates that these programmes can be implemented only by institutions with high quality standard rating and certain experience in implementing educational programmes for respective qualifications. The validation programmes enable the validation of prior learning in accordance with the appropriate standard from the CROQF Register**,** i.e., they must identify which units of learning outcomes need to be demonstrated during validation to qualify for certification, and suggest assessment methods to use, including any relevant instruments necessary for the implementation of the assessment.

In adult education, the validation system is being framed within the new Adult Education Act (Official Gazette 144/21) and the corresponding ordinance.

At the higher education level, given the autonomous status of Universities, internal procedures for the recognition and validation of prior learning are being developed on the individual level by many public and private universities in the country, using the Guidelines for the recognition of prior learning in higher education system.

4. The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualification system are transparent.

The CROQF introduced the CROQF Register, with the following structure: standards of occupations, standards of qualifications and units of learning outcomes. MSEY is responsible for maintenance and development of the Information System of the CROQF Register. The CROQF Register is the basis for a common robust quality assurance system, validation of non-formal and informal learning (which is now being developed) and transparency, access and progression (including mobility).

The CROQF foresees introduction of qualifications standards, which present the content and structure of a specific qualification, and include information about the level, volume expressed in credits, entrance requirements and requirements for acquiring the qualification, the minimum learning outcomes, assessment procedures and examples, as well as material and human resources necessary to acquire the belonging learning outcomes. Standards of qualifications with the role of preparing individuals for the labour market have to be based of occupational standards, which contain the key tasks and competences related to a specific occupation. These are developed on grounds of data obtained from employers at the labour market and therefore indicate their actual requirements. For development of both, competent ministries (MSEY and MLPSFSP) have developed methodologies and prepared guidelines which are available to all interested parties.

A procedure for entry into the CROQF Register starts at the request of any legal entity or a natural person, as well as at the request of national authorities providing that their interest has reasonable grounds.

A request for entry into the Sub-register of units of learning outcomes and the Sub-register of qualifications standards is submitted on a prescribed form to ASHE for qualifications at levels 5 (in the part that relates to higher education); 6.st; 6.sv; 7.1.st; 7.1.sv; 7.2; 8.1; 8.2, and AVETAE for qualifications at levels 2; 3; 4.1; 4.2, and level 5 (in the part that relates to specialist vocational training).

Requests for entry into the Sub-register for qualifications at levels 1 and 4.2 (for general education) are submitted to ETTA, while the entry into the appropriate sub-register is done by AVETAE on the basis of a Decision on entry into the appropriate sub-register by ETTA.

A request for entry into the Sub-register of occupational standards is submitted on a prescribed form to MLPSFSP.

Upon receiving the request for entry into the Sub-register of units of learning outcomes and the Sub-register of qualifications standards, ASHE or AVETAE or ETTA appoint an evaluation committee and, on the basis of the evaluation committee's expert opinion and, in case when a profession is regulated in the Republic of Croatia, the opinion of the public administration body responsible for the regulated profession for the pursuit of which the qualification that is the subject of the proposed qualification standard is acquired, determine the fulfilment of formal and professional conditions for entry into the CROQF Register and adopt a decision on entry into the appropriate CROQF Sub-register.

The evaluation committee will issue a positive opinion on the fulfillment of the professional requirements for entry into the the CROQF Register, or the corresponding sub-register if it assesses, based on the conducted analyses and evaluations, that the proposal for a qualification standard or unit of learning outcomes is in accordance with the guidelines for the development of qualification standards, descriptors of levels of learning outcomes and qualifications prescribed by the CROQF Act and the corresponding occupational standards and units of competences (if the qualification is to ensure employability).

Upon receiving the request for entry into the Sub-register of occupational standards, MLPSFSP, on the basis of the expert opinion of the evaluation committee and, in case when a profession is regulated in the Republic of Croatia, the opinion of the public administration body responsible for the regulated profession that is the subject of the proposed occupational standard, determines the fulfilment of formal and professional conditions for entry into the CROQF Register and adopts a decision on entry into the appropriate CROQF Sub-register.

As an exception, when a public administration body responsible for a regulated profession is also the propounder of the occupational standard for the regulated profession, or rather the propounder of the standard of qualification necessary for performing a regulated profession, a public administration body does not need to issue an opinion for the regulated profession for which standards are being developed.

Procedures for entry into the CROQF Register, internal and external quality assurance system and content and format of the request form as well as the content of the sub-register, are stipulated by the Ordinance on CROQF Register, adopted by the minister responsible for education and science and a subject to approval of the minister responsible for labour.

A single qualification may be acquired through more programmes offered by legal entities accredited for awarding certificates of acquired qualifications, which corresponds to the respective qualification standard.

Additional information is available in the chapter 2.1 Croatian background.

5. The national quality assurance system(s) for education and training refer(s) to the national qualifications frameworks or systems and are consistent with the principles on quality assurance as specified in Annex IV to this recommendation.

In Croatia, the CROQF has been initially developed as a tool that could be used on a voluntary basis. It was additionally encouraged using available funds within the Erasmus+ programme, the European Social Fund and other programmes. Following the legislative changes that took place mostly in 2021 and 2022, the CROQF is now incorporated into all important legislation pertaining to quality assurance in different parts of education.

In the **Act on Quality Assurance in Higher Education and Science** (Official Gazette, No. 151/22),

which prescribes the criteria for the initial accreditation of studies, it is stipulated that when evaluating a study programme, the compliance of the study programme with the qualification standard entered in the CROQF Register is evaluated as well.

A new **Act on Recognition and Assessment of Foreign Education Qualifications** (Official Gazette, No. 69/22) contains provisions on automatic recognition from the Council's Recommendation on promoting automatic mutual recognition of qualifications.

According to the **Act on Adult Education** (Official Gazette, No. 144/21), formal education programmes and evaluation programmes must be aligned with the qualification standard or unit of learning outcomes from the CROQF Register, which achieves the relevance of the programme in relation to the labour market.

Non-formal education of adults for the acquisition of competencies required for work in the sense of this Law includes the implementation of non-formal education programmes that are financed through vouchers from European structural and investment funds and mechanisms for recovery and resilience aligned with the occupational standard or unit of competencies and the qualification standard or unit of learning outcomes from the CROQF Register.

According to the **Act on Vocational Education and Training** (Official Gazette, No. 30/09, 24/10, 22/13, 25/18, 69/22), in line with the 2018 Amendments, the vocational curriculum is adopted on the basis of one or more qualification standards that have been developed on the basis of one or more occupational standards in accordance with the concept of the CROQF.

More detail is provided in the chapter on the Common principles on quality assurance.

6. The referencing process shall include the stated agreement of the relevant quality assurance bodies that the referencing report is consistent with the relevant national quality assurance arrangements, provisions and practice.

Yes

7. The referencing process shall involve international experts and the referencing reports shall contain the written statement of at least two international experts from two different countries on the referencing process.

Two international experts were selected in the beginning of the work on the Report in order to strengthen international trust in the process. Perspective of international experts contributed to the structure of the report from the early beginning as well as to the clarity and relevance of the comprehensive content. Moreover, good practice examples of involvement of stakeholders were consulted with international experts.

International experts involved in the update of the Referencing report of the CROQF to the EQF and self-certification to the QF-EHEA were:

- Aleksandar Sladojević, Slovenia
- Eduard Staudecker, Austria

8. The competent authority or authorities shall certify the referencing of the national qualifications frameworks or systems with the EQF. One comprehensive report, setting out the referencing, and the evidence supporting it, shall be published by the competent authorities, including the EQF National Coordination Points, and shall address separately each of the criteria. The same report can be used for self-certification to the Qualifications Framework of the European Higher Education Area, in accordance with the self-certification criteria of the latter.

This Report, which has been prepared and agreed upon by the competent national bodies, is the single, comprehensive updated referencing and self-certification report of the CROQF to the EQF and QF-EHEA, setting out the referencing and the evidence supporting it. It addresses each of the criteria and procedures agreed upon by the EQF Advisory Group.

9. Within 6 months from having referenced or updated the referencing report, Member States and other participating countries shall publish the referencing report and provide relevant information for comparison purposes on the relevant European portal.

Within 6 months from having updated the referencing report, Croatia will publish the Report on www.kvalifikacije.hr and provide relevant information to the European Commission and other institutions for the purposes of publishing the Report on the relevant European portal.

10. Further to the referencing process, all newly issued documents related to qualifications that are part of the national qualifications frameworks or systems (e.g., certificates, diplomas, certificate supplements, diploma supplements) and/or qualification registers issued by the competent authorities should contain a clear reference, by way of national qualifications frameworks or systems, to the appropriate EQF level.

The CROQF was introduced in Croatia as a reform tool that includes everyday processes with the final goal of improving the quality of qualifications and their relevance on the labour market. In order to support the CROQF, the CROQF Register was developed. **The CROQF Register now contains numerous qualification standards which contain a clear indication of the CROQF level and EQF level. Furthermore,** the form and the content of awarded document upon completion of a study programme is regulated by the **Ordinance on the form and content of certificate, diploma and diploma supplement of study programmes, passed in 2023.** The Ordinance prescribes the **content of diploma supplement** now obligatory includes information on the **level of the** CROQF **and the level of** EQF.

However, not all newly issued documents related to qualifications that are part of the national qualifications frameworks or systems currently contain a reference to the appropriate EQF level. Linking the CROQF Register with other databases of programmes in Croatia is one of the important future steps and a prerequsite for including EQF level on all newly issued documents.

4.2 Response to the Common Principles for Quality Assurance

Quality assurance procedures have changed significantly since the presentation of the initial report.

The CROQF has been initially developed as a tool that could be used on a voluntary basis. It was additionally encouraged using available funds within the Erasmus+ programme, the European Social Fund and other programmes. Following the legislative changes that took place mostly in 2021 and 2022, the CROQF is now incorporated into all important legislation pertaining to quality assurance in different parts of education.

According to the **Act on Adult Education** (Official Gazette, No. 144/21), formal education programmes and evaluation programmes must be aligned with the qualification standard or unit of learning outcomes from the CROQF Register, which achieves the relevance of the programme in relation to the labour market. Non-formal education of adults for the acquisition of competencies required for work in the sense of this Law includes the implementation of non-formal education programmes that are financed through vouchers from European structural and investment funds and mechanisms for recovery and resilience aligned with the occupational standard or unit of competencies and the qualification standard or unit of learning outcomes from the CROQF Register.

According to the **Act on Vocational Education and Training** (Official Gazette, No. 30/09, 24/10, 22/13, 25/18, 69/22), in line with the 2018 Amendments, the vocational curriculum is adopted on the basis of one or more qualification standards that have been developed on the basis of one or more occupational standards in accordance with the concept of the CROQF.

In the **Act on Quality Assurance in Higher Education and Science** (Official Gazette, No. 151/22), which prescribes the criteria for the initial accreditation of studies, it is stipulated that when evaluating a study

programme, the compliance of the study programme with the qualification standard entered in the CROQF Register is also evaluated.

A new **Act on Recognition and Assessment of Foreign Education Qualifications** (Official Gazette, No. 69/22) entered into force in Croatia. It contains provisions on automatic recognition from Council's Recommendation on promoting automatic mutual recognition of qualifications.

A new **Act on Higher Education and Scientific Activity,** adopted in 2022, regulates the link between lifelong learning programmes in higher education and the CROQF.

In the period from 2018 to 2020, subject curricula for all obligatory subjects for **elementary and grammar schools** (gimnazija) have been brought as well as subject curricula for general subjects for vocational secondary school at level 4.2. Curriculums of 7 cross-curricular topics were also developed. The learning outcomes of the curricula of cross-curricula topics are either directly embedded in the relevant subject curricula or are achieved through the planning and implementation of the school curriculum (curriculum at the level of education provider). The reform introduced a change in the pre-tertiary education and it includes a change of curricula (with learning outcomes approach) and focuses also on the continuous professional development of teachers, investments in infrastructure and school equipment thus emphasizing the role of education agencies responsible for teacher training and professional development. The education reform has focused on: the development of core competences for lifelong learning, clearly defined educational outcomes, open systems of methodology and didactics providing professionals in early childhood and pre-school education, teachers, children and students with the freedom to choose content, methods and forms of work and clearly defined standards/criteria for the assessment and evaluation.

Quality assurance principles for qualifications that are part of national qualifications frameworks or systems referenced to the European Qualifications Framework (EQF):

All qualifications with an EQF level should be quality assured to enhance trust in their quality and level. In accordance with national circumstances and taking into account sectoral differences quality assurance of qualifications with an EQF level should:

1. address the design of qualifications as well as application of the **learning outcomes approach**;

The CROQF includes a register of units of learning outcomes, occupations, qualifications, curricula and accredited institutions for assessment and certification, which are the base for a common quality assurance system for the whole educational system, covering all aspects, from fit for purpose up to reliability of teaching, assessment and awarding process.

In line with the legislation, study programmes need to be developed in line with the learning outcomes approach. According to the Act on Quality Assurance in **Higher Education** and Science, the study programme proposal contains, among other things, a list of compulsory and elective courses with an indication of the ECTS workload and planned learning outcomes.

In 2018, MSEY adopted the **National Curricula for Vocational Education and Training**. For each qualification level, it proposes teaching time devoted to general content, vocational modules, elective modules and work-based learning. The national curriculum for VET also defines general entry and completion requirements for different types of programme, general horizontal and vertical permeability, and the general forms of assessment of learning outcomes. The assessment of work-based learning is expected to result from the cooperation of VET teachers and workplace mentors, while the assessment of learners with special needs will be tailored to individual learning plans.

Adult education in the scope of the Adult Education Act includes implementation of formal programmes for the acquisition and evaluation of units of learning outcomes/curriculum for the acquisition of qualifications on levels prescribed by the Law. Formal adult education programmes have undergone a complete transformation and the establishment of a more flexible and dynamic way of their creation and implementation linked to the CROQF. From 2021, with the entry into force of the new Adult Education Act (Official Gazette 144/2021), the preconditions for the full implementation and connection of formal adult education programmes with the CROQF have been created.

Adult education programmes according to this law include programmes at levels 1, 2, 3, 4, 4.1 and 4.2 and at level 5 of the CROQF. Article 12 of the Adult Education Act, paragraphs 5 and 6, prescribes that the education programme through which a qualification is obtained, or a unit of learning outcomes must be compliant with the standard of qualifications from the CROQF Register. The adult education provider is obliged within three or six months, depending on the type of programme, from the day of registration or change of the units of learning outcomes or qualification standards in the CROQF Register to harmonize the education programmes with the standard of qualifications or unit of learning outcomes in the CROQF Register. The complete and mandatory linking of programme creation with the standards from the CROQF Register ensures the long-term quality of their creation, continuous alignment with the needs of the labour market or personal development of the individual with the aim of upgrading or acquiring new knowledge and skills.

In the period from 2018 to 2020, subject curricula for all obligatory subjects for **elementary and grammar schools** (gimnazija) have been brought as well as subject curricula for general subjects for vocational secondary school at level 4.2. Curriculums of 7 cross-curricular topics were also developed. The learning outcomes of the curricula of cross-curricula topics are either directly embedded in the relevant subject curricula or are achieved through the planning and implementation of the curriculum school curriculum (curriculum at the level of education provider). The reform introduced a change in the pre-tertiary education and it includes a change of curricula (with learning outcomes approach) and focuses also on the continuous professional development of teachers, investments in infrastructure and school equipment thus emphasizing the role of education agencies responsible for teacher training and professional development. The education reform has focused on: the development of core competences for lifelong learning, clearly defined educational outcomes, open systems of methodology and didactics providing professionals in early childhood and pre-school education, teachers, children and students with the freedom to choose content, methods and forms of work and clearly defined standards/criteria for the assessment and evaluation.

2. ensure valid and reliable assessment according to agreed and transparent **learning outcome-based standards** and address the process of certification;

Quality assurance processes operated by the ASHE for **higher education** is designed to monitor assessment of units of learning outcomes and qualifications, including conditions in which teaching takes place. When conducting external evaluations, ASHE evaluates inputs (e.g., intended learning outcomes and content of study programmes, teaching staff, space and equipment, etc.), processes (e.g., teaching process, evaluation process of intended learning outcomes, internal quality assurance processes, processes that relate to student support, etc.), outputs (e.g., achievement of intended learning outcomes, graduation, employability, etc.) and the context in which the higher education institution operates. When evaluating the intended learning outcomes of the study programmes, their compliance with the generic descriptors of the CROQF level is taken into account, and in case the qualification standard is adopted, compliance with the standard is taken into account as well.

According to the **Law on Vocational Education and Training** (Official Gazette, No. 30/09, 24/10, 22/13, 25/18, 69/22), in line with the 2018 Amendments, the vocational curriculum is adopted on the basis of one or more qualification standards that have been developed on the basis of one or more occupational standards in accordance with the concept of the CROQF.

Adult education programmes according to the Adult Education Act include programmes at levels 1, 2, 3, 4, 4.1 and 4.2 and at level 5 of the CROQF. Article 12 of the Adult Education Act, paragraphs 5 and 6, prescribes that the education programme through which a qualification is obtained, or a unit of learning outcomes must be compliant with the standard of qualifications from the CROQF Register. The adult education provider is obliged within three or six months, depending on the type of programme, from the day of registration or change of the units of learning outcomes or qualification standards in the CROQF Register to harmonize the education programmes with the standard of qualifications or unit of learning outcomes in the CROQF Register. The complete and mandatory linking of programme with the standards from the CROQF Register ensures the long-term quality of their creation, continuous alignment with the needs of the labour market or personal development of the individual with the aim of upgrading or acquiring new knowledge and skills.

The law also provided for a transitional period of three years from the entry into force of the new law, so that programmes based on old approvals can also be carried out, but already the vast majority of adult education programmes are aligned with the CROQF Register.

As an integral part of the quality assurance system in adult education, the new Adult Education Act also introduced external evaluation of units of learning outcomes. External evaluation of units of learning outcomes is an independent evaluation procedure carried out by independent examiners or groups of examiners who check the adoption of units of learning outcomes of participants and/or applicants, and is under the jurisdiction of AVETAE. External evaluation of units of learning outcomes of participants can be carried out during the defence of the final paper and the final examination as part of the education programme or the examination of learning outcomes as part of the evaluation programme, except for programmes that, based on other regulations, end with a special external evaluation procedure.

With the entry into force of the Ordinance on Standards and Norms for the Implementation of Adult Education Programmes (Official Gazette, No. 14/23), adult education institutions can, from February 2023, prepare and obtain approval only for programmes that are aligned with the CROQF Register.

In the period from 2018 to 2020, subject curricula for all obligatory subjects for **elementary and grammar schools** (gimnazija) have been brought as well as subject curricula for general subjects for vocational secondary school at level 4.2. Curriculums of 7 cross-curricular topics were also developed.

Table 4.2: Overview of national and international educational assessments.

Type	Name	Organisation(s)	Age and grade	Compulsory	Subjects	Purpose
National examination	Državna matura/State Matura	NCEEE	Age 18 Grade 4, i.e., end of secondary education	Compulsory for grammar school students in order to complete secondary education Optional for vocational school students (if they wish to continue their education in the higher education institutions)	Mandatory: Croatian language, Mathematics, foreign language Elective: chosen by students themselves (e.g., Chemistry, Physics, Biology, Geography etc.)	University-entering assessment
National examination	Nacionalni ispit/ National exam	NCEEE	5th and 8th grade of primary school Age: 11 and 14, respectively	Introduced in the 2021/2022 school year in 81 schools	Croatian language, Mathematics, foreign language, science subjects depending on a grade, History (8th grade)	Assessment of the educational outcomes
International assessment	Programme for International Student Assessment/ PISA	OECD	Age: 15-16 Grade 7 or higher	No	Reading, mathematics, science	Assessment of student performance in reading, mathematics and science
International assessment	Trends in International Mathematics and Science Study/TIMSS	IEA	Age: 10 and 14 Grade 4th and 8th	No	Mathematics, science	Assessment of student achievement in mathematics and science

3. consist of feedback mechanisms and procedures for continuous improvement;

All procedures carried out by ASHE include feedback mechanisms and procedures for continuous improvement. Quality assurance in **higher education** and in science is regulated by the 2022 Act on Quality Assurance in Higher Education and Science. ASHE, in accordance with the Act on Quality Assurance in Science and Higher Education, is the only agency in Croatia responsible for conducting

external evaluation procedures for higher education institutions and study programmes. All higher education institutions and study programmes in Croatia are subject to an external evaluation by ASHE in line with the ESG. Based on the conducted external evaluation process, ASHE decides on the outcome of the external evaluation process (granting the authorisation, or refusing the authorisation). Procedures includes self-assessment report, site visit and external review report which is publicly available on ASHE and DEQAR website. ASHE regularly collects data from external evaluation procedures and use them for improvement as a part of ASHE internal quality assurance system based of PDCA cycle. The authorised studies are entered in the Register of Study Programmes maintained by the MSEY. Higher education institutions cannot issue higher education qualifications for those study programmes that are not authorised. Similarly, an institution which does not have an authorisation to pursue higher education activities cannot pursue said activity. This official status prescribed by the Croatian legislative framework ensures the recognition of ASHE's accreditation decisions by all organisations and bodies in Croatia (ministries, professional chambers, higher education institutions, employers, etc.). Internal quality assurance is provided by the institutions' internal quality assurance systems. All higher education institutions are subject to cyclical reaccreditation every five years.

External evaluation of **institutions** for **adult education** is carried out by **AVETAE**. Pursuant to the Ordinance on the method of external evaluation of adult education institutions and units of learning outcomes, as well as the method of work and appointment of the committee for objections to the report on external evaluation (Official Gazette 19/2023), institutions are subject to external evaluation every five to seven years based on the Annual Plan for the Implementation of External Evaluation of Institutions or at the institution's request. In addition to AVETAE, **the following participate** in **the external evaluation** of institutions:

- the expert commission for the implementation of the external evaluation of the institution
- the council for expert opinion on the conducted procedure of the external evaluation of the institution
- the committee for objections to the report on the external evaluation of the institution

In the process of external evaluation of the institution:

- The expert committee for the implementation of the external evaluation of the institution **visits** the institution **and**, upon completion of the visit, **submits a report** on the external evaluation of the institution.
- The Council for Expert Opinion on the Institution's External Evaluation Procedure delivers **an opinion** on the institution's external evaluation procedure.
- AVETAE **issues a report** on **the external evaluation** of the institution, which includes a proposal for an assessment of the institution's quality level, as well as a decision on the assessment of the quality level.
- In the event that the institution previously objected to the report, **the committee for objections** to the report on the external evaluation of the institution decides on its merits.

4. involve all relevant stakeholders at all stages of the process;

Development of qualification standards involves, in line with relevant guidelines, education institutions and all other relevant stakeholders. Both MSEY with its' agencies as well as MLPSFSP are responsible for the governance of the CROQF. Daily running of the CROQF includes expert evaluation of proposals of occupational standards, performed by the permanent evaluation committee of MLPSFSP composed of different stakeholders, as well as expert evaluation of proposals of qualification standards performed by

expert committees of the agencies in the education system. Besides, the NCDHP is a central strategic body of the Republic of Croatia for developing the CROQF. It is a strategic body made up of different stakeholders - representatives of education and the labour market, public and private sectors, social partners that include employers' organizations and trade unions, representatives of all levels of education. Quality assurance agencies are involved in evaluation both standards and programmes.

5. be composed of consistent evaluation methods, associating self-assessment and external review;

In **higher education**, the national quality assurance body – ASHE, adopted quality standards with relevant indicators as well as all external evaluations procedures. All standards and procedures are in line with the national legislative framework, ESG and good international practice. All relevant stakeholders were involved in development of mentioned standards and procedures. Procedures include self-assessment report, site visit and external review report which is publicly available on ASHE and DEQAR website. ASHE regularly collects data from external evaluation procedures and use them for improvement as a part of ASHE internal quality assurance system based of PDCA cycle.

Qualification awarding programmes and institutions in higher education are also accredited by adequate relevant institutions, namely ASHE. The static part of the system unit of learning outcomes is assured during its creation. Any other structure that is comprised of units is assured automatically. The dynamic part of the system, validation and awarding processes, are assured by an accreditation system for each level of the CROQF. This organisational structure provides a closed cycle of quality assurance throughout the system.

In higher education under external evaluation procedure, ASHE evaluated adjustment of intended learning outcomes with level descriptors, in line with the ESG 1.2.

In vocational education, according to the VET Act, **VET schools** are obliged to conduct **self-evaluation**. In the process of self-evaluation, VET schools independently and with full responsibility assess the quality of their work with the aim of systematic improvement and achieving better results. Self-evaluation takes place **during the school year** and schools carry it out for the following priority areas: work planning and programming, teaching and learning support, student achievements and learning outcomes, material conditions and human potential and professional development of the institution's employees, cooperation within the vocational education institution and cooperation with other stakeholders and promotion of the institution and management (institution and quality). VET schools are obliged to prepare a self-evaluation report after the self-evaluation. In addition to the above, AVETAE carries out the following activities: continuous advisory support to schools in the implementation of the self-evaluation process; implementation of professional training for quality commissions and school self-evaluation teams; monitoring the implementation of the self-evaluation process - self-evaluation reports; visits to schools with the purpose of support; reporting on the self-evaluation process.

According to the law, the quality assurance system **in adult education** includes an internal and external quality assurance system. The internal quality assurance system is established by the institution itself, and as part of that system, it regularly carries out a self-evaluation process. The effectiveness of the internal quality assurance system and the regularity of the implementation of the self-evaluation process are checked in the external evaluation process.

According to the law, in order to improve the quality of educational activities, educational activities are carried out in school's external evaluation and self-evaluation, and it refers to the conduct of national exams and measurement level of quality of all components of the national curriculum. Annual implementation plan for the external evaluation of school institutions, at the proposal of the Council for the national curriculum is adopted by the minister. External evaluation is carried out by the NCEEE.

Schools are obliged to use the results of national examinations and all other performance indicators educational work for analysis and self-evaluation, in order to permanently improve the quality of work of schools. Method of implementing external evaluation and using the results of the evaluation of school institutions is prescribed by the minister. The Council for the National Curriculum is an advisory body of the minister that deals with matters of drafting and development of the national curriculum and the qualitative improvement of educational activity at primary and secondary school level.

6. be an integral part of the **internal management**, including sub-contracted activities, of bodies issuing qualifications with an EQF level;

In higher education, all institutions that offer units and qualifications within the CROQF are legally required to have in place internal systems of quality assurance in order to ensure consistent assessment practices and compliance with awarding organisations' requirements. These requirements apply regardless of the nature of the institutions or whether or not these institutions are publicly funded.

Amendments to the Vocational Education Act defined two bodies in the implementation of the self-evaluation process at the school level, i.e., the quality committee and the school self-evaluation team. The school's self-evaluation is monitored and evaluated by the Quality Committee appointed by the management body of the vocational education institution. A school self-evaluation team is appointed for the operational implementation of the self-evaluation process at the school level.

The complete system of quality assurance in adult education was established by the adoption of the new Adult Education Act (Official Gazette 144/2021). According to this law, the quality assurance system in adult education includes an internal and external quality assurance system. The internal quality assurance system is established by the institution itself, and as part of that system, it regularly carries out a self-evaluation process. The effectiveness of the internal quality assurance system and the regularity of the implementation of the self-evaluation process are checked in the external evaluation process. Institutions for adult education carry out self-evaluation on the basis of guidelines and tools for self-evaluation adopted by AVETAE.

7. be based on clear and measurable **objectives, standards and guidelines**;

The internal quality assurance system in higher education institutions is implemented in accordance with ESG Part I. When conducting the external evaluation, ASHE evaluates the effectiveness of institution's internal quality assurance system in accordance with ESG I (the national quality standards used for evaluation in higher education include all elements from ESG I, which was confirmed in ENQA's international evaluation of ASHE).

In 2020, AVETAE adopted the Self-Evaluation Methodology of Vocational Education Institutions. The Ordinance on the advancement of teachers, professional associates and principals in primary and secondary schools and student dormitories (Official Gazette 68/2019, 60/2020, 32/2021) introduces criteria related to work as part of evaluation, self-evaluation and external evaluation, which recognizes the role of the Quality Committee, the school self-evaluation team and the self-evaluation coordinator.

Quality areas and quality standards in adult education were adopted by AVETAE through the Handbook for internal quality assurance in adult education - *Guidelines, areas and tools for self-assessment* (Priručnik za unutarnje osiguravanje kvalitete u obrazovanju odraslih, Smjernice, područja i alati za samovrednovanje, 2022.) and *Guidelines for the implementation of external evaluation of institutions for adult education* (Smjernice za provedbu vanjskog vrednovanja ustanova za obrazovanje odraslih, 2023.).

There are a total of 18 quality standards grouped into five areas: institution management and quality assurance system; educational programmes, learning and teaching; student achievements and student

care; human and material resources; informing the public, communication and cooperation, integrity and ethics.

School self-evaluation is a process of systematic and continuous monitoring, analysis and evaluation of school performance. It is used as an important instrument for strengthening the school's capacity and for the progress, development and success of all stakeholders in the educational process. It is a process of professional reflection through which schools get to know themselves well and find the best ways to improve their work. Self-evaluation enables school employees to evaluate the quality of their teaching and classroom atmosphere, respecting the context of the narrow - school and wider - social, social and cultural environment. The NCEEE has created a guide for the implementation of the self-evaluation process in primary schools. The self-evaluation process seeks to answer three fundamental questions: *How good is our school? How do we know this? What can we do to be even better?*

8. be supported by appropriate resources;

ASHE was established in 2005 by the Decree of the Government of the Republic of Croatia, in accordance with the European Council Recommendation (98/561/EC) on European cooperation in quality assurance in higher education and the Recommendation of the European Parliament and the Council of Europe (2006/143/EC) on further European cooperation in quality assurance in higher education, as well as the European model of agencies for external quality assurance in higher education based on implementation of Standards and Guidelines for Quality Assurance in the EHEA (ESG, 2005 and 2015).

Following the first Act on quality assurance in Science and Higher Education, adopted by the Croatian Parliament in 2009, the ASHE was appointed as the sole, independent national authority for quality assurance in higher education and science in Croatia.

The Act on quality assurance in Science and Higher Education enabled the ASHE (ESG 3.2) to achieve its full independence (ESG 3.3) and bring its quality assurance activities into compliance with the Standards and Guidelines for quality assurance in the EHEA (ESG).

In a system of higher education and science that faces many challenges, the ASHE has been recognised as a factor of stability that assembles and connects all the stakeholders in the system, and encourages them to work together and agree on common development policies, while ensuring the conditions for their achievement.

ASHE obtained full membership of ENQA and was included in EQAR in 2011.

By the Law on AVETAE (Official Gazette, 24/10 from 22 February 2010), AVETAE was established. The activities of the AVETAE are carried out within the organizational units established by the Statute of the AVETAE and the Ordinance on internal organization and systematization of workplaces of the AVETAE and Ordinance.

The NCEEE is responsible for the overall external evaluation of the pre-tertiary education system in the Republic of Croatia. The NCEEE:

- examinations on the basis of which the national standards of educational achievements of students are assessed (state matriculation exams, national exams and other external evaluation exams)
- international research in education (PISA, TIMSS, TALIS, ICCS, etc.)
- creates a task bank
- analyze, statistically process and publish the results of the conducted examinations
- creates and publishes exam catalogs and manuals for exam preparation and implementation

- on the basis of evaluation analyses, it makes proposals to MSEY for the permanent improvement of the quality of education
- conducts external evaluation of experimental programmes
- prepares models for external evaluation of educational institutions, licensing and certification of professional qualifications
- organizes seminars for external collaborators (authors of exam tasks, evaluators, subject commissions, etc.) on the preparation and implementation of exams
- deals with scientific research work in the field of educational measurements and external evaluation of knowledge, skills and other competencies
- performs other tasks in connection with the implementation of state matriculation exams, national exams and other external evaluation exams

9. include a regular review of existing external monitoring bodies or agencies, carrying out quality assurance;

ASHE is accredited and periodically evaluated by the ENQA and EQAR. Based on results of the mentioned international evaluations, ASHE obtained full membership of ENQA and was included in EQAR in 2011, confirming the credibility of ASHE as a European agency mandated to conduct external quality assurance procedures throughout the EHEA.

The ASHE's membership in ENQA and EQAR was renewed twice – in 2017 and 2022. Graded with the high-level scores in the 2022 international evaluation (ENQA Agency Review 2022), the ASHE was included among the best-rated quality assurance agencies in the EHEA, which is a result of long-standing work and monitoring of international trends.

AVETAE is the Quality Assurance National Reference Point in the EQAVET Network in line with the Council Recommendation of 24 November 2020 on vocational education and training (VET) for sustainable competitiveness, social fairness and resilience 2020/C 417/01.

10. include the electronic accessibility of evaluation results.

On the level of higher education, all quality assurance procedures are coordinated by ASHE. ASHE's official status prescribed by the Croatian legislative framework ensures the recognition of the ASHE's accreditation decisions by all organisations and bodies in Croatia (ministries, professional chambers, higher education institutions, employers, etc.). ASHE is registered in the EQAR. The EQAR website (DEQAR) provides data on ASHE, which is transparent, internationally available, and it concerns the outcomes of evaluations carried out by ASHE in line with the ESGs.

Vocational education institutions draw up a self-evaluation report on the self-evaluation process and plan and implement improvements to their work based on the results of the self-evaluation process. In the self-evaluation process, schools use the e-Quality online self-evaluation tool, the self-evaluation manual with guidelines for self-evaluation, and the self-evaluation methodology of vocational education institutions. In the period 2015 - 2023, with the support of the Erasmus+ EQAVET NRP project, additional tools and instruments were developed to support schools in the implementation of the self-evaluation process (available at: www.qavet.hr).

The National Information System of Adult Education consolidates records on institutions, education programmes and evaluation programmes, participants, applicants, external evaluation of units of learning outcomes in test centers, andragogic employees and records on other data important for monitoring

the state and development of the adult education system. The National Adult Education Information System is part of the development of a complete programme solution as part of the *Informatization of processes and the establishment of a complete electronic enrolment service in educational institutions (eEnrolments) project*. The e-Enrolment system enables the computerization and linking of the process of enrolment in early and preschool education institutions, primary and secondary schools, registration for state matura exams and registration for adult education programmes. The computerization of the process stems from the need to provide the citizens of the Republic of Croatia with a simple, fast and transparent enrolment process in educational institutions without unnecessary administrative work.

The purpose of the National Information System of Adult Education module is to collect data on adult education institutions and the programmes they implement and to unify the nomenclature of adult education programmes and associated data. The National Information System of Adult Education is intended for use by administrators of institutions that implement adult education programmes in order to be able to submit a request for registration of an adult education programme for which the adult education institution has a Decision. Users of MSEY can review received requests and edit them if necessary.

Self-certification process and report

5. Self-certification process and report

The self-certification process is undertaken according to the criteria set by the QF-EHEA. A detailed explanation of the fulfilment of criteria is explained in this Report. Already during initial referencing and self-certification process, a clear comparison of QF-EHEA level descriptors with both CROQF level descriptors and descriptors of qualification is demonstrated. CROQF levels related to higher education qualifications are: 5, 6.st, 6.sv, 7.1.st, 7.1.sv, 7.2, 8.1 and 8.2. The CROQF descriptors (knowledge, skills, responsibility and autonomy) were matched against each QF-EHEA level descriptor. Equivalence of CROQF descriptors of qualification to QF-EHEA level descriptors was confirmed.

Tables which are part of this Report show the referencing of university and professional degrees to the QF-EHEA cycles. The tables clearly demonstrate how CROQF higher education degrees correspond to QF-EHEA cycles according to the minimal amount of required ECTS of learning outcomes at a certain level.

Following the introduction of Bologna principles, the postgraduate master's degree does not exist in the current higher education system in Croatia. However, since the qualifications which are awarded after completion of these programmes have been present on the labour market, the CROQF consequently differentiates between level 8.1 postgraduate masters' programmes and level 8.2. doctoral study programmes. The postgraduate master's degree, which required a minimum of one year of original either scientific or artistic research, is clearly differentiated from doctoral qualifications which require a duration of three years (180 ECTS). During the referencing process, it is recognised that postgraduate master's degree and the corresponding qualification *Magistar znanosti* is a qualification referenced to EQF level 8 (as partial qualification), since the level of learning outcomes is compatible with learning outcomes relevant to qualifications at EQF level 8. With regard to the QF-EHEA, qualifications are matched with the Bologna second cycle.

Types of Higher Education Degrees in Croatia

Higher education is provided through university and professional studies. University studies are organised and delivered at universities while professional studies are organised and delivered at polytechnics and universities.

University studies include university undergraduate studies, university graduate studies, university integrated studies, university specialist studies and doctoral studies. Professional studies include professional short-cycle studies, professional undergraduate studies and professional graduate studies.

University degrees qualify students for jobs in science, arts and higher education, in the business and the public sector and society at large, and for developing and applying scientific, artistic and professional achievements. Degrees are awarded following the completion of accredited programmes within recognised institutions of higher education. University degrees include three levels: undergraduate, graduate and postgraduate.

University undergraduate degrees correspond to the first cycle of QF-EHEA and level 6.sv of the CROQF. These degrees are awarded following the completion of accredited programmes lasting three to four years and students are required to earn minimum of 180 or 240 ECTS credits, respectively. Upon completion students are awarded the academic title and corresponding qualification of *sveučilišni prvostupnik (baccalaureus)* with reference to their specialisation or *sveučilišni prvostupnik inženjer* (for programmes in technical and some programmes in biotechnical field).

A person who has completed the relevant secondary education programme lasting at least four years and has passed the State Matura examination may enrol in university undergraduate studies. The

conditions for enrolment in university undergraduate studies shall be determined in a decision of the higher education institution. Upon completion students may continue their studies at graduate level or enter the labour market.

University graduate degrees correspond to the second cycle of QF-EHEA and level 7.1.sv of the CROQF. These degrees are awarded following the completion of accredited programmes lasting one to two years and students are required to earn a minimum of 60 or 120 ECTS credits, respectively. University graduate studies in which the students enrol after three years of university studies take two years to complete and carry at least 120 ECTS credits. University studies in which the student enrols after four years of university studies take one year to complete and carry at least 60 ECTS credits, or take two years to complete and carry at least 120 ECTS credits. Some graduate programmes are integrated and students are required to earn a minimum of 300 ECTS (for example, Law) or 360 ECTS (Medicine, Veterinary medicine, Dental medicine). Upon completion students are awarded the academic title and corresponding qualification of *sveučilišni magistar* with reference to a specialisation or *sveučilišni magistar inženjer* (for programmes in technical and some programmes in biotechnical field) or *doktor* (for programmes in medicine, dental medicine or veterinary medicine).

A person who has completed the relevant university undergraduate studies or university integrated studies may enrol in university graduate studies. By way of exception, university graduate studies may also be enrolled by a person who has completed the relevant professional undergraduate studies, in accordance with the general act of the higher education institution delivering the studies, and subject to the passing of differential exams determined by the higher education institution. A person who has completed the relevant secondary education programme of at least four years and passed the State Matura examination may enrol in university integrated undergraduate and graduate studies. The conditions for enrolment in university graduate studies shall be determined in a decision of the higher education institution.

Upon completion students may continue their studies at postgraduate level or enter the labour market.

University specialist degrees correspond to the second cycle of QF-EHEA and level 7.2 of the CROQF. These degrees are awarded following the completion of accredited one to two year study programmes and students are required to earn a minimum of 60 or 120 ECTS credits, respectively. Upon completion students are awarded the academic title and corresponding qualification *specijalist* with reference to a specialisation or *sveučilišni specijalist* (for programmes in the field of medicine, dental medicine, veterinary medicine, pharmacy, medical biochemistry etc.).

A person who has completed the relevant university graduate studies or university integrated undergraduate and graduate studies (level 7.1. sv.) may enrol in university specialist studies. By way of exception, a person who has completed professional graduate studies may also enrol in university specialist studies, by taking differential exams defined by the higher education institution or by having at least five years of service in the field of studies. The conditions for enrolment in the university specialist studies shall be laid down in a decision of the higher education institution.

Upon completion students may enter the labour market as these studies qualify them for jobs requiring highly developed specialist knowledge, skills and competences.

Postgraduate master degrees do not exist in the actual higher education system in Croatia. These degrees correspond to the second cycle of QF-EHEA and level 8.1 of CROQF. These programmes required a minimum of one year of original either scientific or artistic research. Upon completion of an accredited study programme students are awarded the academic title and corresponding qualification of *magistar znanosti* usually with reference to a specific field. Upon completion students may continue their studies at postgraduate (doctorate) university study or enter the labour market.

Doctoral degrees correspond to the third cycle of QF-EHEA and level 8.2 of CROQF. They require a minimum of three years of original either scientific or artistic research. Upon completion students are awarded the academic title and a corresponding qualification of *doktor znanosti* with reference to a specific field. ECTS credits are used for taught courses but are not specified for research. Still, in practice ECTS credits are used to measure volume of learning or research outcomes.

A person who has completed the relevant university graduate studies or university integrated undergraduate and graduate studies (level 7.1.sv) or university specialist studies (level 7.2.) may enrol in doctoral studies.

Upon completion students are qualified for independent scientific or artistic work.

Professional degrees qualify students for particular professional jobs in the business and the public sector and society at large. Professional degrees include three CROQF levels: professional short-cycle studies, professional undergraduate studies and professional graduate studies.

Professional short-cycle degrees correspond to the first cycle of QF-EHEA and level 5 of CROQF. Professional short-cycle degree is awarded following completion of accredited programmes lasting two years and students are required to earn at least 120 ECTS credits.

Upon completion of a professional short-cycle with a minimum of 120 ECTS, students are awarded the professional title and corresponding qualification of *pristupnik* with reference to their specialization.

Professional short-cycle studies may be enrolled by a person who has completed the relevant secondary education programme. The conditions for enrolment in professional short-cycle studies shall be laid down in a decision of the higher education institution.

Upon completion of professional short-cycle studies students may enter the labour market in particular specialized professional jobs or may enrol in professional undergraduate study.

Professional undergraduate degrees correspond to the first cycle of QF-EHEA and level 6.st. of CROQF. Professional undergraduate degree is awarded following the completion of accredited programmes lasting three to four years and students are required to earn a minimum of 180 or 240 ECTS credits, respectively. Upon completion of a professional undergraduate programme with a minimum 180 ECTS, students are awarded the professional title and corresponding qualification of *prvostupnik (baccalaureus)* with reference to a specialisation or *prvostupnik inženjer* (for programmes in technical and some programmes in biotechnical field). A person who has completed the relevant secondary education programme lasting at least four years and has passed the State Matura examination may enrol in professional undergraduate studies. The conditions for enrolment in professional undergraduate studies shall be determined in a decision of the higher education institution. Upon completion of professional undergraduate studies students may continue their studies at graduate level or enter the labour market.

Professional graduate degrees correspond to the second cycle of QF-EHEA and level 7.1. st of CROQF. These degrees are awarded following the completion of accredited programmes lasting one to two years and students are required to earn a minimum of 60 or 120 ECTS credits, respectively. Professional graduate studies in which the students enrol after three years of professional undergraduate studies take two years to complete and carry at least 120 ECTS credits. Professional graduate studies which the student enrols after four years of professional undergraduate studies take one year to complete and carry at least 60 ECTS credits, or take two years to complete and carry at least 120 ECTS credits.

Upon completion students are awarded the title and corresponding qualification of *magistar* with reference to a specialisation or *magistar inženjer* (for programmes in technical and some programmes in biotechnical field). A person who has completed the relevant professional or university undergraduate

studies may enrol in professional graduate studies. The conditions for enrolment in professional graduate studies shall be determined in a decision of the higher education institution.

Upon completion students may enter the labour market.

The entry requirements for all levels of university and professional studies are determined by the higher education institutions themselves. Higher education institutions autonomously determine conditions for admission into second cycle programmes after the completion of either university or professional first cycle programmes. Even for the same profile of studies, they may set additional courses and exams as requirements for students who are transferring from professional to university studies (courses usually focus on the development of research skills or theory-based knowledge) or from university to professional studies (courses usually focus on the development of practical skills).

State Matura is a compulsory, final written exam of general education at the end of secondary school. The goal of the State Matura is the assessment and validation of students' knowledge, skills and competencies achieved during primary and secondary education in accordance with educational plans and programmes.

Based on the results of the State Matura, a student's knowledge is objectively and fairly assessed. In this way it is possible to compare the grades of all students in the Republic of Croatia, thus enabling fair entry into further education and employment.

By passing the State Matura, students from general secondary schools are awarded with secondary school qualification, and analogous students from secondary vocational and art schools are awarded with secondary vocational qualification.

The State Matura is provided by an independent national body of the NCEEE in collaboration with schools. The body carries out external assessment of the educational system of the Republic of Croatia as well as exams based on national standards.

The State Matura is provided on the same day throughout the Republic of Croatia, at the same time, under the same conditions and criteria for all students. The organisational procedure of the State Matura is strictly defined.

The State Matura consists of compulsory and elective parts. Exams from the compulsory part may be at two levels: A – advanced and B – basic. There are three compulsory exams and an optional number of elective exams.

Higher educational institutions accept the State Matura as entry exams.

A student successfully passes the State Mature if he/she passes four classes of secondary education and the three compulsory Matura exams. After successfully passing the State Matura, students from general secondary schools are awarded with *svjedodžba*. For successfully passing elective exams they are awarded with a certificate. Students from secondary vocational and art schools are awarded with a certificate for passing either the compulsory or elective part of the State Matura.

Table 5.1: CROQF Level descriptors in higher education.

LEVEL	KNOWLEDGE	SKILLS			AUTONOMY	RESPONSABILITY
		Cognitive skills	Practical skills	Social skills		
8	Creating and evaluating new facts, concepts, procedures, principles and theories in a field of research that extends the frontier of knowledge;	Using advanced, complex, original, highly specialized knowledge, skills, activities and procedures required for developing new knowledge and new methods as well as for integrating different fields.	Creating, evaluating and performing new proposed specialized activities and new methods, instruments, tools and materials.	Creating and applying new social and generally acceptable forms of communication and cooperation in interaction with individuals and groups of different affiliations and different cultural and ethnical origin.	Demonstrating personal professional and ethical authority, managing scientific research activities and a commitment to development of new ideas and/or processes.	Taking ethical and social responsibility for successful execution of research, socially beneficial results and potential social consequences.
7	Evaluating highly specialized knowledge in a field of work and/or learning some of which are at the forefront of the field and can provide the basis for original thinking and/or scientific research as well as for integrating different fields of knowledge.	Critical evaluation and creative thinking in solving new and complex problems, required as the basis for the development of new knowledge and the ability to integrate knowledge in different fields in unpredictable situations.	Performing complex activities and applying complex methods, instruments, tools and materials, developing instruments, tools and materials required in research and innovation processes and adjusting complex methods.	Managing and leading a complex communication process, interactions with others and cooperation in different social groups in unpredictable social situations.	Managing and leading development activities in unpredictable surrounding conditions and making decisions in uncertain conditions.	Taking personal and group responsibility for strategic decision-making and successful execution and completion of tasks in unpredictable situations, as well as social and ethical responsibility during the execution of tasks and for their resulting consequences.
6	Evaluating specialized facts, concepts, procedures, principles and theories in a field of work and/or learning, including their critical comprehension.	Collecting, interpreting, estimating, selecting and creatively applying different relevant facts, concepts and procedures required to generate solutions and for solving complex tasks or problems within a specialized field of work in unpredictable situations, as well as ability to transfer knowledge to other areas and problems.	Performing complex activities and applying complex methods, instruments, tools and materials in unpredictable situations, developing instruments, tools and materials and adjusting complex methods.	Managing complex communication, interactions with others and cooperation in different social groups in unpredictable social contexts.	Managing professional projects in unpredictable situations.	Taking ethical and social responsibility for managing and evaluating professional individual and group development in unpredictable situations.
5	Analysing, synthesizing and evaluating specialized facts, concepts, procedures, principles and theories in a field of work and/or learning, evaluating, giving rise to an awareness of the frontier of knowledge.	Interpreting, estimating, selecting and creatively applying different relevant facts, concepts and procedures required to generate solutions and for solving complex tasks or problems within a specific field of work and/or learning in partially unpredictable situations, as well as ability to transfer knowledge to other areas and problems.	Performing complex actions and applying complex methods, instruments, tools and materials in partially unpredictable situations, developing instruments, tools and materials and adjusting simple methods.	Partial management of complex communication in interactions with others and establishing cooperation in a group in partially unpredictable social contexts.	Taking part in the management of activities in partially unpredictable situations.	Taking responsibility for managing evaluation and for improving activities in partially unpredictable situations.

5.1 Responses to the QF-EHEA Criteria

Criterion 1 (QF-EHEA)

The national framework for higher education qualifications and the body or bodies responsible for its development are designated by the national ministry with responsibility for higher education.

MSEY is designated as the national ministry with responsibility for higher education. MSEY is designated as the EQF national coordination point.

A request for entry into the Sub-register of units of learning outcomes and the Sub-register of qualifications standards is submitted on a prescribed form to ASHE for qualifications at levels 5 (in the part that relates to higher education); 6.st; 6.sv; 7.1.st; 7.1.sv; 7.2; 8.1; 8.2.

Upon receiving the request for entry into the Sub-register of units of learning outcomes and the Sub-register of qualifications standards, ASHE appoints an evaluation committee and, on the basis of the

evaluation committee's expert opinion and, in case when a profession is regulated in the Republic of Croatia, the opinion of the public administration body responsible for the regulated profession for the pursuit of which the qualification that is the subject of the proposed qualification standard is acquired, determines the fulfilment of formal and professional conditions.

Criterion 2 (QF-EHEA)

There is a clear and demonstrable link between the qualifications in the national framework and the cycle qualification descriptors of the European framework.

Each descriptor from the QF-EHEA cycles was compared in the process of preparing the initial referencing report with the corresponding descriptor in the CROQF in order to assess the conceptual and semantic, as well as the discursive consistency between the two frameworks. It was concluded that there was a consistency between the qualification level descriptors of the CROQF and the cycle descriptors of the QF-EHEA and that there was a high degree of recognisability, reflecting the fact that the CROQF was developed based on the Bologna Framework. The two frameworks were compared to ascertain whether there is an immediate recognisability between the qualification levels of the CROQF for Higher Education and the three cycles of the QF-EHEA.

Table 5.2: Corresponding EQF, QF-EHEA and CROQF levels

CROQF level	EQF level	QF-EHEA cycles
8.2	8	3
8.1	8	2
7.2	7	2
7.1.sv	7	2
7.1.st	7	2
6.sv	6	1
6.st	6	1
5	5	Short cycle

According to the CROQF Act (2021), the framework has thirteen levels. The law regulates the placement of qualifications at the levels of CROQF, in such a way that the levels of qualifications obtained at the end of **professional and university studies** are clearly distinguished, while accepting their value and diversity. Level descriptors were subject to only a slight change. In Appendix A »Descriptors of levels of learning outcomes«, level 7, in the second column »Descriptors of levels of learning outcomes« in the domain »Knowledge« the words: »and scientific research« are replaced by the words: »and/or scientific research«.

Level 6.st covers professional bachelor's diplomas, while 6.sv includes university bachelor's diplomas. Similarly, levels 7.1.st and 7.1.sv respectively include professional and academic master's diplomas. Such differentiation was a result of a big public debate during preparation of the Amendments of the CROQF Act. The fundamental difference between professional and university studies stems from the different learning outcomes that are acquired in different types of studies. The descriptions of learning outcomes defined by the CROQF focus on the complexity and content of learning outcomes, and not on the type of study or the institutional context in which these outcomes are acquired. This placement of qualifications into levels respects the tradition and continuity of Croatian higher education and the fact that former

(dodiplomski) professional studies that lasted at least four years (e.g., teaching), as well as university studies, were immanent to level 7. Qualifications acquired at university and professional studies differ in the share of knowledge and skills in learning outcomes. The diversity of university and professional studies is recognized by the use of the CROQF in the content and complexity of learning outcomes and their purpose. Graduates of university studies are directed to work in science, art and higher education, the public sector, etc., and they open the possibility of enrolling in doctoral studies, but they also train them to perform professional occupations. On the other hand, graduates of professional studies are directed primarily to the performance of professional occupations and direct involvement in the work process.

Criterion 3 (QF-EHEA)

The national framework and its qualifications are demonstrably based on learning outcomes, and the qualifications are linked to ECTS or ECTS compatible credits.

All qualifications included in the CROQF for higher education are clearly described using learning outcomes-based terminology. Learning outcomes are categorized as knowledge, skills and associated autonomy and responsibility, and these three categories are further divided into subcategories, allowing for a systematic approach in the formulation of outcome descriptors and the easy comparison between qualification levels and degree types.

ECTS credits are related to the CROQF higher education levels in table below.

Table 5.3: ECTS linked to the CROQF levels.

QF-EHEA cycles	CROQF level		Minimum ECTS credits as set out in the CROQF	ECTS credit ranges from QF-EHEA
Third cycle	8.2		180 ECTS credits	Not specified
Second cycle	8.1		Minimum of one year of original scientific or artistic research is required and at least one published original scientific paper with relevant international review *This qualification cannot be obtained anymore.	-
	7.2		60 ECTS credits, with a minimum of 60 credits at level 7 or higher of the CROQF	Typically include 90 -120 ECTS credits, with a minimum of 60 credits at the level of the 2nd cycle
	7.1.st	7.1.sv	60 ECTS credits, with a minimum of 60 credits at level 7 or higher of CROQF; 300 ECTS credits together with first cycle qualification, with a minimum of 180 credits at level 6 or higher of CROQF, including a minimum of 60 credits at level 7 or higher of CROQF	Typically include 90 -120 ECTS credits, with a minimum of 60 credits at the level of the 2nd cycle
First cycle	6.st	6.sv	180 ECTS credits, with a minimum of 120 credits at level 6 of CROQF.	Typically include 180 - 240 ECTS
First cycle sublevel				

Professional studies (6.st, 7.1.st) shall qualify students for particular professional jobs in the business and the public sector and society at large.

University studies (6.sv, 7.1.sv, 8.2) shall be organised and delivered at universities and shall include university undergraduate studies, university graduate studies, university integrated studies, university specialist studies and doctoral studies.

Criterion 4 (QF-EHEA)

The procedures for inclusion of qualifications in the national framework are transparent.

The procedures for inclusion of qualifications in the national framework are transparent.

The national qualifications framework is now integrated into the Croatian higher education system in different ways. Following the procedure of study programme external evaluation (accreditation) conducted by ASHE, it is an explicit ambition underpinning the CROQF for higher education that it shall reflect the Croatian higher education sector, and that new educational programmes are to be developed so as not only to meet the needs and demands of society but also to fit into the established qualifications structure. Furthermore, the form and the content of awarded document upon completion of a study programme is regulated by the Ordinance on the form and content of certificate, diploma and diploma supplement of study programmes, passed in 2023. The Ordinance prescribes the content of diploma supplement, which now must include information on the level of the CROQF and the level of EQF.

Procedures for entry into the CROQF Register, internal and external quality assurance system and content and format of the request form as well as the content of the sub-register, are stipulated by the Ordinance on the CROQF Register, adopted by the minister responsible for education and science and a subject to approval of the minister responsible for labour and explained in the Guidelines for the development of qualification standards in higher education. A procedure for entry into the CROQF Register starts at the request of any legal entity or a natural person, as well as at the request of national authorities providing that their interest has reasonable grounds. A request for entry into the Sub-register of units of learning outcomes and the Sub-register of qualifications standards is submitted on a prescribed form to ASHE for qualifications at levels 5 ((in the part that relates to higher education); 6.st; 6.sv; 7.1.st; 7.1.sv; 7.2; 8.1; 8.2). Upon receiving the request for entry into the Sub-register of units of learning outcomes and the Sub-register of qualifications standards, ASHE appoints an evaluation committee and, on the basis of the evaluation committee's expert opinion and, in case when a profession is regulated in the Republic of Croatia, the opinion of the public administration body responsible for the regulated profession for the pursuit of which the qualification that is the subject of the proposed qualification standard is acquired, determine the fulfilment of formal and professional conditions for entry into the CROQF Register and adopt a decision on entry into the appropriate CROQF Sub-register.

Criterion 5 (QF-EHEA)

The national quality assurance system for higher education refers to the national framework of qualifications and is consistent with the Berlin Communiqué and any subsequent communiqués agreed by ministers in the Bologna Process.

The national quality assurance system for higher education is consistent with the ESG.

In the Act on Quality Assurance in Higher Education and Science (Official Gazette, No. 151/22), which prescribes the criteria for the initial accreditation of studies, it is stipulated that when evaluating a study

programme, the compliance of the study programme with the qualification standard entered in the CROQF Register is also evaluated.

The European Standards and Guidelines for Quality Assurance in the EHEA (ESG), which have been developed by ENQA (the European Association for Quality Assurance in Higher Education) is the cornerstone of the Croatian national quality assurance system (Article 30, Paragraph 4 of the Act on Quality Assurance in Higher Education and Science (Official Gazette, No. 151/22).

ASHE was established in 2005 by the Decree of the Government of the Republic of Croatia on Establishment of ASHE (Official Gazette 101/04, 08/07), in accordance with the European Council Recommendation 98/561/EC on European cooperation in quality assurance in higher education and the Recommendation of the European Parliament and the Council of Europe (2006/143/EC) on further European cooperation in quality assurance in higher education, as well as the European model of agencies for external quality assurance in higher education, based on implementation of the ESGs.

ASHE has been a full member of ENQA and has been listed in the European Quality Assurance Register for Higher Education (EQAR) since 2011, and, and is obliged to undergo this procedure every five years in order to demonstrate its compliance with the ESG and renew its membership in both EQAR and ENQA.

In 2021, ASHE has successfully passed the international external evaluation procedure, which for the third time since its establishment (2005) confirmed the credibility and quality of its work, i.e., external quality assurance procedures in higher education. ASHE underwent international review also with the aim of renewing both its ENQA and EQAR membership. ASHE succeeded in renewing both memberships.

At its regular session held in March 2022, the ENQA Board passed a positive decision on external review of ASHE, i.e., the renewal of its full membership in ENQA (ENQA Review Report). On 7 July 2022, the *European Quality Assurance Register for Higher Education - EQAR* passed a decision to renew the membership of ASHE, which makes its registration valid until 31 April 2027. The successful renewal of both its EQAR and ENQA membership serves to confirm ASHE's credibility as well as the compliance of its work with the Standards and Guidelines for Quality Assurance in the EHEA (ESG).

Criterion 6 (QF-EHEA)

The national framework, and any alignment with the European framework, is referenced in all Diploma Supplements.

The form and the content of awarded document upon completion of a study programme is regulated by the **Ordinance on the form and content of certificate, diploma and diploma supplement of study programmes**, passed in 2023. A student who has completed higher education study programme in the Republic of Croatia, along with the certificate or diploma, is issued with diploma supplement in the Croatian language.

The Ordinance prescribes the content of diploma supplement regarding personal data of the student, details on the study programme and the acquired qualification, as well as information regarding CROQF and EQF (conditions for access and the level of the CROQF required for access, level of acquired qualification – type of study programme, level of study, university/professional, level of the CROQF, level of EQF) and information on higher education system in Croatia.

Criterion 7 (QF-EHEA)

The responsibilities of the domestic parties to the national framework are clearly determined and published.

The responsibilities of the domestic parties to the national framework are clearly determined and published **in the CROQF Act.**

The national coordination point for the EQF is placed within MSEY. According to the Law on the CROQF, **MSEY performs the following tasks:**

- adopting guidelines for the development of qualifications standards in cooperation with agencies responsible for education;
- referencing of the CROQF to the EQF and self-certification of the CROQF against the QF-EHEA;
- coordinating quality assurance related to qualifications and learning outcomes, in line with the Law;
- developing and maintaining the IT system for the management of the CROQF Register;
- developing a system for recognition and validation of prior learning;
- monitoring and analysing the implementation of the system for the validation of learning outcomes acquired through non-formal and informal learning and proposing measures for its regulation;
- adopting guidelines and preparing other material required for implementation and development of the CROQF;
- administrative support to the NCDHP;
- developing the role of the CROQF in procedures related to the recognition and identification of qualifications.

MLPSFSP performs the following tasks:

- establishing and developing a system of information collection about current and future labour market needs and required competences;
- collecting data about changes in competences required for occupations and proposing developments of qualifications standards and occupational standards according to labour market needs;
- participating in preparation and elaboration of strategic background material, as well as analysis for developing the CROQF, aimed at enhancing employability and raising competitiveness of the Croatian economy and society;
- preparing and elaborating analytical background material and methodology for elaboration of occupational standards and managing the Sub-register of occupational standards;
- monitoring the employability of persons with acquired qualifications;
- adopting decisions on entry into respective CROQF Sub-registers;
- formal and expert validation of occupational standards;
- establishing an evaluation committee for expert validation of occupational standards in accordance with the decision of the minister in charge of labour;
- collecting and analysing data necessary for the network interface of the labour market from institutions responsible for keeping registers from their jurisdictions, and are crucial for the development and implementation of the CROQF. The type and volume of data being exchanged shall be regulated by the Ordinance on the CROQF Register.

ASHE performs the following tasks in accordance with their jurisdiction:

– evaluation of compliance of learning programmes with the CROQF standards
– establishing Sectoral councils made up of stakeholders in accordance with the criteria prescribed by this Law;
– administrative and expert support to the work of the Sectoral councils;
– making decisions on entry into the appropriate CROQF sub-registers;
– monitoring the implementation and development of national qualifications frameworks of other countries;
– monitoring and analysing the implementation and development of qualifications frameworks in other countries' education policies

5.2 Responses to the QF-EHEA Procedures

Procedure 1 (QF-EHEA)

The competent national body/bodies shall self-certify the compatibility of the national framework with the European framework.

yes

Procedure 2 (QF-EHEA)

The self-certification process shall include the stated agreement of the quality assurance bodies in the country in question, as recognised through the Bologna Process.

Quality assurance bodies, ASHE and MSEY, will formally endorse the self-certification process.

Procedure 3 (QF-EHEA)

The self-certification process shall involve international experts.

Two international experts were selected in the beginning of the work on the Report in order to strengthen international trust in the process. Perspective of international experts contributed to the structure of the report from the early beginning as well as to the clarity and relevance of the comprehensive content. Moreover, good practice examples of involvement of stakeholders were consulted with international experts.

International experts involved in the update of the Referencing report of the CROQF to the EQF and self-certification to the QF-EHEA were:

- Aleksandar Sladojević, Slovenia
- Eduard Staudecker, Austria

Procedure 4 (QF-EHEA)

The self-certification and the evidence supporting it shall be published and shall address separately each of the criteria set out.

The updated Self-Certification Report as a part of the comprehensive Referencing and Self-Certification Report will be published on the website www.kvalifikacije.hr.

Procedure 5 (QF-EHEA)

The ENIC and NARIC networks shall maintain a public listing of States that have confirmed that they have completed the self-certification process

Croatia will inform relevant stakeholders in Croatia and relevant bodies in EHEA when the updated self-certification process as a part of the updated referencing process is completed, so that Croatia may be included on the list of countries that have completed the updated self-certification process as maintained on the web sites of the EHEA and the ENIC and NARIC Networks.

Procedure 6 (QF-EHEA)

The completion of the self-certification process shall be noted on Diploma Supplements issued subsequently by showing the link between the national framework and the European framework.

The form and the content of awarded document upon completion of a study programme is regulated by the **Ordinance on the form and content of certificate, diploma and diploma supplement of study programmes**, passed in 2023. A student who has completed higher education study programme in the Republic of Croatia, along with the certificate or diploma, is issued with diploma supplement in the Croatian language.

The Ordinance prescribes the content of diploma supplement regarding personal data of the student, details on the study programme and the acquired qualification, as well as information regarding CROQF and EQF (conditions for access and the level of the CROQF required for access, level of acquired qualification – type of study programme, level of study, university/professional, level of the CROQF, level of EQF) and information on higher education system in Croatia. QF-EHEA level is not yet indicated.

Challenges in the implementation of the CROQF and further plans

6. Challenges in the implementation of the CROQF and further plans

The CROQF is currently in an advanced stage of its development, with a large part of its mechanisms developed, numerous stakeholders informed and involved in the process, and cooperation with other EQF NCPs and other networks in place. However, there are further challenges and aims which need to be met to further improve the implementation of the CROQF and its impact in different areas.

a) Financial means for maintaining the CROQF Register

The CROQF was introduced in Croatia as a reform tool that includes everyday processes with the final goal of improving the quality of qualifications and their relevance on the labour market. In order to support the CROQF, the CROQF Register was developed, which consists of applications for different groups of users, such as evaluation committees, administrators in ministries and agencies, potential sectoral experts, sector councils, institutions which submit proposals and users of the public web of the CROQF Register. **The developed CROQF Register is crucial to ensure the EQF visibility on certificates. It needs to be continuously improved on the one hand in order to adapt to changing regulations and to ensure the link with other databases of programmes, and on the other hand to keep up with technological requirements since applications have become outdated over time.** The CROQF Register was developed with the help of a separate EQF grant, which was specifically intended for the development of national qualifications databases. Such grants are no longer awarded, but there is still a need for continuous development of national qualifications databases. Despite the fact that other funds are now used for maintaining and improving the CROQF Register, acquiring financial means for upgrading the CROQF Register presents often a challenge.

b) Forecast of labour market needs

In Croatia, there are numerous opportunities for cooperation between the economy and education in shaping qualifications in order to improve the opportunities of the individual on the labour market. In addition to the joint participation of representatives of the labour market and education in the creation of occupational standards, qualification standards and related programmes, there are many potentials for cooperation in the implementation of educational programmes. Discussion has shown that the available opportunities for cooperation between education and the labour market are very well used, but there are still obstacles to overcome. There is already an excellent set of data showing the current state of the labour market in the Republic of Croatia. The Portal for advanced tracking of labour market was released in 2022. It provides advanced labour market analysis for registered users, retrieving data from the Croatian Employment Service, the Croatian Pension Insurance Institute and MSEY. It is however desirable to continue developing the research of future labour market needs as a basis for an adequate development of qualifications. Ad hoc research of future labour market needs has already been carried out in Croatia, but it is not a part of systematic solutions. **Systematic research of future labour market needs would contribute to the development of qualifications that will be aligned with both present and future needs.** The further elaboration of this topic is planned within the MLPSFSP project.

c) Role of stakeholders in shaping qualifications: establishment of sectoral councils

An insight into the regulations related to the CROQF shows the significant involvement of stakeholders, which refers to the various bodies in the creation and approval of qualifications, to the work of the NCDHP as a strategic body, and the work of sectoral councils that have a strategic role with regard to the respective sector. **Sectoral councils are advisory and professional bodies ensuring the development of human potential in line with labour market needs within 25 respective sectors**, appointed by the

agencies responsible for higher education and science and vocational education and training. Sectoral councils analyse the existing and necessary competencies within the sector, propose recommendations for the development of the sector and promote the sector and employment opportunities within the sector. It was sometimes difficult to gather all relevant stakeholders to establish all sectoral councils.

d) Communication on the CROQF and the EQF

Inclusion of various stakeholders is essential for successful implementation of the CROQF and the EQF. Therefore, it is important to continue raising awareness of the role, value and mechanisms of the CROQF and its relation to the EQF, in order to encourage the stakeholders to take part in the process of its implementation. The core CROQF structures and bodies encompass a wide range of stakeholders, including employers, educational institutions, trade unions, non-governmental organizations, state and public bodies. In this context, it is particularly important to mention the NCDHP, as well as sectoral councils. Communication about the CROQF, and consequently the EQF, can explain the added value of a framework for different group of stakeholders: MSEY, MLPSFSP, quality assurance agencies which implement the CROQF procedures in their domain, labour market stakeholders that develop proposals of occupational standards, higher education institutions, adult education institutions and schools that develop proposals of qualification standards, pupils, students and parents as well as general public. Given the fact that the CROQF went through substantive change of legislative framework in 2021 and in the meantime significant experience of stakeholders with the new procedures has been gained, it is planned to develop a **communication strategy on the CROQF which would help build the clear image of the CROQF qualifications both in Croatian and in an international context**, analyse and recommend different communication tools toward different group of stakeholders and would serve as s basis for future activities related to the CROQF in a national and in an international context. Furthermore, the strategy can help stakeholder organisations to improve their own communication strategies when communicating about the CROQF.

e) Further encouragement of the development of microcredentials

In principle, the term *micro-credentials*, which is defined at the European level, has already come into use in Croatia. In the last few years, measures were implemented in Croatia, in order to increase the country's capacity to expand the offer of shorter educational programmes for acquiring micro-credentials. Procedures for ensuring the quality of such programs have been established at all levels.

AVETAE developed a detailed 'Methodology for creating adult education programmes for acquiring micro-qualifications, partial qualifications and full complete qualifications financed through vouchers and other sources of financing'. The methodology provides clear instructions for planning, creating and developing educational programmes in the field of adult learning. In higher education, in Croatia, micro-credentials are not defined as a term in higher education regulations but the Croatian higher education system recognizes education programmes that have been aligned with the concept and essentially represent what are considered micro-credentials agreed at the European level. A new Act on Higher Education and Scientific Activity has been adopted in 2022, which regulates the link between lifelong learning programmes in higher education and the CROQF.

The system of vouchers has primarily, when launched, focused on acquiring green and digital skills in demand on the labour market with the planned goal of including 30,000 users in education, for which funds have been secured from the National Recovery and Resilience Plan 2021-2026. Later a system upgrade was introduced that enabled the award of vouchers for education programmes that acquire or improve all skills required on the labour market, not only those related to the green and digital transition. Despite the fact that this upgrade was introduced, including additional users is one

of furher challenges in the implementation of the system of vouchers. Funds from the European Social Fund + with the planned inclusion of additional users in education until 2027 have been secured for the upgrade of the education voucher system.

Furthermore, the potential of micro-credentials has not yet been sufficiently explored in higher education, despite the established procedures. The legislative framework in higher education was improved, and clear guidelines were adopted as a basis for the development of shorter programmes at the level of higher education. Further steps are needed to expand the offer of micro-credentials in higher education to increase their diversity. In this sense, the use of ESF+ funds is foreseen.

f) Full establishment of the system of recognition of prior learning in Croatia

With recent developments, Croatia has laid good foundations for the establishment of a system of recognition and evaluation of prior learning, by adopting guidelines in higher education and preparing regulations and foundations in adult education. The introduction of recognition of prior learning (acknowledgment of non-formal and informal learning) can be considered an important factor in building the CROQF. Significant steps were taken in the last few years.

Legislation was only recently developed in adult education, which provides for the recognition of prior learning in Croatia. According to the Adult Education Act from 2022, the evaluation programme should be aligned with the units of learning outcomes from the CROQF Register, levels 2 to 5 of the CROQF (vocational specialist training). It is then adopted by the institution for adult education with a previous positive expert opinion from AVETAE. Compliance with the qualification standard or units of learning outcomes in the CROQF Register is mandatory. The institution's evaluation programme must be entered in the NISOO.

The methodology for creating the evaluation programme is adopted by AVETAE, and the method of applying and conducting the evaluation of prior learning has been stipulated by the MSEY in the Ordinance on the method of applying and conducting the evaluation of prior learning. The evaluation of previous learning is carried out for the purpose of obtaining a micro-credential or partial qualification at levels 2 to 5 of the CROQF, a full qualification at level 2 of the CROQF, a full qualification at level 3 of the CROQF, which is also carried out in regular education, and a new full qualification at the level 3, 4.1 or 4.2 of the CROQF, which is also implemented in regular education. The recognition of prior learning in adult education has still not been implemented. Further step now includes a finalization of required methodological tools to enable the start of the recognition of prior learning in adult education in practice.

MSEY has provided legal prerequisites for the recognition and evaluation of prior learning in higher education, which enables higher education institutions to apply such practices to a greater extent. Recognition of prior learning in the higher education system is carried out during enrolment through the approval of exemptions from attending and taking courses or parts of courses. Four stages of recognition and evaluation of non-formal and informal learning from the EU Council Recommendations are taken into account. National regulations do not allow the application of recognition of prior learning in higher education if a person does not have the qualification necessary for access to higher education. Furthermore, it is not possible to award a full qualification in higher education solely on the basis of recognition of prior learning. The advantages are a shorter duration of study (especially for part-time learners and working learners), an increase in the completion rate of higher education, an increase in the number of students enrolled in higher education institutions (attracting older students and underrepresented groups), encouraging lifelong learning (initiating professional development programs for the needs of lifelong studies at universities) and the possible awarding of micro-credentials. Further

challenge in higher education now refers to the national coordination, effective dialogue among higher education institutions and providing opportunities for sharing examples of good practice.

g) Green and digital transition

According to the *Evaluation of the Council Recommendation of 22 May 2017 on the European Qualifications Framework for lifelong learning*, key developments that impact the relevance of the EQF and stakeholders' needs include green and digital transitions. Evaluation showed that the digital and green transitions belong to the macro-trends that will impact the needs of EQF stakeholders in ways which will require further EQF revisions and the development of qualifications and their frameworks.

Within the framework of the MLPSFSP project "Skills Mapping for Green and Digital Transition" (2021-2024), a Catalogue of Green and Digital Skills was created. The goal of the Catalogue of Green and Digital Skills was that individual institutions which develop occupational standards do not invent new green and digital skills, which are often very similar to existing ones, but that they can already download them from the Catalogue. The Catalogue also serves users who want to apply for vouchers, because that way they also get an overview of the corresponding programmes. The starting point for its creation were the units of competences registered in the CROQF Register. Expert classification, carried out by experts, and classification using artificial intelligence were carried out in parallel. There are currently 948 green and 3427 digital skills in the Catalogue (May 2024).

In 2022, Croatia started implementing the voucher system, the aim of which was to enable greater participation of unemployed and employed people in lifelong education with an emphasis on acquiring skills related to the green and digital transition (https://vjestine.hzz.hr/projekt). In order to detect further educational programmes acceptable for the allocation of vouchers, **it is necessary to further carry out the process of mapping relevant skills and establish a sustainable database that will enable the future implementation of the voucher system.** Further skills mapping will focus on priority skills on the labour market, with an emphasis on digital and green, which is also a prerequisite for the implementation of the voucher system.

h) Short cycle qualifications

Understanding the qualifications that are part of the qualifications framework often focuses on the qualifications that make up the majority of the qualifications system. In Croatia, only a few short-cycle qualifications have been entered into the Register of study programmes. In line with the recommendations on short-cycle qualifications in higher education prepared by the Thematic Working Group A on Short-Cycle Qualifications in higher education, *the short-cycle qualifications in higher education are designed not only to develop learners' professional knowledge, skills and competences to facilitate their entering labour market in a briefer period of time than bachelor studies, but also equip them with sufficient autonomy to continue further higher education studies. Thus, countries that intend introducing the short-cycle qualifications in higher education should consider the twofold purpose of these qualifications – on one hand, ensuring labour market oriented learning outcomes and, on other hand, providing future pathways for higher education studies. A point for discussion is differentiation between short-cycle qualifications and micro-credentials, and whether these types of qualifications may be the same in terms of the purpose. Although both short-cycle qualifications and micro-credentials are full qualifications designed to provide learners with professional knowledge, skills and competences, short-cycle qualifications are more focused on facilitating entrance into the labour market and career advancement, while micro-credentials are more focused on personal and professional development. Furthermore, the short-cycles qualifications as defined by the Paris Communiqué are part of the overarching QF-EHEA, while micro-credentials may represent various education sectors and their inclusion in a qualifications framework remains under the decision of the countries.*

i) Enrolment policy

In higher education, MSEY forwards all the needs of the labour market prepared annualy that come by from the Croatian Employment Service to all public and private higher education institutions with a recommendation that they align their enrolment policies with these needs. Of course, the Ministry of Economy and Sustainable Development also plays an important role, by directing students of trades' professions to attend work-based learning part of the classes at employers, i.e., in the economy, and determining a sufficient number of places for apprenticeships. The NCDHP recommended to include the Croatian Chamber of Crafts in the procedure of determining enrolment quotas in secondary education related to programmes in crafts since the Croatian Chamber of Crafts has data on number of craftsmen by county.

j) Recognition processes of third country nationals

Following the adoption of the *Commission Recommendation on recognition of qualifications of third country nationals*, an important challenge is effective outreach and communication to attract and explain recognition processes to third country nationals. The Commission Recommendation called on Member States to implement coordinated approaches to information provision and support services that support and enable third-country nationals. The MSEY conducted a public consultation on the Ordinance on recognition and evaluation criteria for the purpose of continuing education at the higher education level, on the basis of Article 15 of the Act on the Recognition and Evaluation of Foreign Educational Qualifications (Official Gazette No. 69/2022). In order to facilitate the recognition process of third country nationals who cannot submit documents required for recognition, the draft ordinance also includes the procedure for evaluating prior learning for asylum seekers, foreigners under subsidiary protection and foreigners under temporary protection as well as their family members legally residing in the Republic of Croatia who are unable to submit documentation proving a foreign educational qualification or a period of education abroad for the purpose of continuing education at the level of higher education.

Written statements

WRITTEN STATEMENT ON THE UPDATED REFERENCING AND SELF-CERTIFICATION REPORT OF THE CROATIAN QUALIFICATIONS FRAMEWORK WITH THE EUROPEAN QUALIFICATIONS FRAMEWORK AND WITH THE QUALIFICATIONS FRAMEWORK OF THE EUROPEAN HIGHER EDUCATION AREA

Statement by Aleksandar Sladojević, international expert – Slovenia

The updated referencing and self-certification report of the Croatian Qualifications Framework with the European Qualifications Framework and with the Qualifications Framework of the European Higher Education Area is clear and well structured. It reflects the changes in the Croatian education and training system since the last referencing report.

The report offers a clear overview of the benefits of the CROQF. These benefits collectively enhance the flexibility, quality, and international recognition of Croatian qualifications, supporting both individual career growth and broader economic development.

The document outlines a comprehensive modernization process characterized by both structural and content-related changes. These changes impact the entire educational system, spanning professional qualifications, general education, and higher education. This transformation is meticulously detailed across various chapters, providing a clear and thorough overview.

In addition to the continuous monitoring of qualification developments, the active involvement of diverse stakeholders plays a crucial role. This collaborative approach ensures that the modernization process is inclusive, dynamic, and responsive to the needs of all parties involved.

In conclusion, Croatia has an operational framework, where the qualifications are described in learning outcomes and are quality guaranteed. The framework is open to internal and international development. With this report the somewhat complex system of qualifications in Croatia is described and made more transparent and understandable for the international audience.

Aleksandar Sladojević

CLASS: 030-02/24-02/69
FILE NO: 355-03-03-24-01
Zagreb, 16 of October 2024

To whom it may concern

The Croatian Agency for Science and Higher Education (ASHE) is a public, independent and internationally recognised institution, sole national body responsible for the external quality assurance in higher education and science in Croatia. This means that the quality assurance of all higher education qualifications in the national framework falls under ASHE's remit.
ASHE is tasked with many different activities, which also includes the maintenance of the sub-registers related to higher education levels within the Croatian Qualifications Framework Register, as well as responsibility for the promotion, maintenance and further development and implementation of the Croatian Qualifications Framework (CROQF).
The Agency is responsible for carrying out and improvement of external quality assurance procedures in science and higher education, which directly influences the development of internal quality assurance of higher education institutions and scientific organizations. ASHE fosters the ongoing enhancement of quality assurance in higher education and science. The aim of these efforts is the continuous improvement of quality of higher education institutions and scientific organisations, contributing to the better position and recognition of Croatian higher education and science within the European Higher Education Area and the European Research Area. The ASHE's internal and external quality assurance procedures are fully compliant with the European Standards and Guidelines for Quality Assurance in Higher Education (ESG), which was confirmed in 2022 when The European Quality Assurance Register for Higher Education – EQAR, for the third time passed a decision to renew the membership of ASHE. The successful renewal of both its EQAR and ENQA membership serves to confirm ASHE's credibility as well as the compliance of its work with the ESG.

As director of ASHE, I welcome this Referencing report and endorse the conclusions contained herein.

Professor Danijela Horvatek Tomić
Director

Donje Svetice 38/5
10 000 Zagreb, Republic of Croatia
T + 385 1 6274 800
F ured@azvo.hr
W www.azvo.hr

REPUBLIC OF CROATIA
MINISTRY OF SCIENCE, EDUCATION AND YOUTH
mzom.gov.hr

Class: 602-04/23-10/00077
File No.: 533-04-24-0014

Zagreb, October 22, 2024

Certification of the updated Referencing and Self-certification Report of the Croatian Qualifications Framework to the European Qualifications Framework and to the Qualifications Framework of the European Higher Education Area

I hereby confirm that the updated Referencing and Self-certification Report of the Croatian Qualifications Framework (CROQF) to the European Qualifications Framework (EQF) and to the Qualifications Framework of the European Higher Education Area (QF-EHEA) has been made in accordance with the criteria and procedures agreed by the EQF Advisory Group and the Bologna Follow-Up Group and is therefore certified by the Ministry of Science, Education and Youth of the Republic of Croatia.

REPUBLIKA HRVATSKA - 1 - ZAGREB - MINISTARSTVO ZNANOSTI OBRAZOVANJA I MLADIH

MINISTER

Radovan Fuchs, PhD

WRITTEN STATEMENT ON THE UPDATED REFERENCING AND SELF-CERTIFICATION REPORT OF THE CROATIAN QUALIFICATIONS FRAMEWORK WITH THE EUROPEAN QUALIFICATIONS FRAMEWORK AND WITH THE QUALIFICATIONS FRAMEWORK OF THE EUROPEAN HIGHER EDUCATION AREA

International Expert Statement by Eduard Staudecker, Austria – Head of Unit I/5, Federal Ministry of Education, Arts and Culture; Member of the EQF AG

The report describes in a comprehensive and clear way the new developments, implementation procedures and overall political approaches in the context of the Croatian Qualifications Framework (CROQF). The report is an output of political process and discussions and enormous effort to bring stakeholders on board. Croatia gives with this report a statement that the CROQF and the EQF are valuable tools for the further development of the Croatian Qualifications system. For any person, who is more interested in the overall education and qualification system of Croatia this is the perfect first hand document to get a deep, scientific and overall insight.

The work with the Team in Croatia was professional and productive. Two online meetings were organised and my feedback input was integrated comprehensively in the report. Furthermore, mutual learning took place especially when it comes to the basic concept of the CROQF.

The numerous legal documents that were produced in the last years are explained and presented in a transparent and interesting way. New developments since the last report are highlighted and give an insight in a stable and modern approach to build the basis for a solid qualification system in Croatia.

The detailed description of the overall "concept of the CROQF" makes it clear that the CROQF has a fundamental legal and conceptual basis. In particular, when it comes to the occupational and qualification standards, the register, learning outcomes and credit system, the reader gets a fundamental and transparent insight.

The European aspect in the context of the CROQF is reported sufficiently and interlinks to several European policy initiatives that can be derived, e.g., micro-credentials, recognition of prior learning. The CROQF makes a substantial contribution to the European Skills politics.

All criteria are answered in a sufficient manner and from an external view all criteria are fulfilled. In conclusion, the CROQF with its updated report provides a valuable and comprehensive input to national and European politics in the field of education and labour market.

LIST OF ACRONYMS

MSEY	Ministry of Science, Education and Youth
ASHE	Agency for Science and Higher Education
AVETAE	Agency for Vocational Education and Training and Adult Education
ETTA	Education and Teacher Training Agency
MLPSFSP	Ministry of Labour, Pension System, Family and Social Policy
NCEEE	National Centre for External Evaluation of Education
CROQF	Croatian Qualifications Framework
CROGE	Croatian Credit System for General Education
ECTS	European Credit Transfer and Accumulation System
CSVET	Croatian Credit System for Vocational Education and Training
EQF	European Qualifications Framework
QF-EHEA	Qualifications Framework of the European Higher Education Area